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# GRAMMATOGRAPHY

A

# MANUAL OF REFERENCE

TO THE

# ALPHABETS OF ANCIENT AND MODERN LANGUAGES

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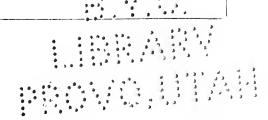
BASED ON THE GERMAN COMPILATION

OF

F. BALLHORN.

411 821

TRÜBNER AND CO., 60, PATERNOSTER ROW.
1861.



#### PREFACE.

THE GRAMMATOGRAPHY is offered to the Public as a compendious introduction to the reading of the most important ancient and modern languages. Simple in its design, it will be consulted with advantage by the Philological Student, the Amateur Linguist, the Bookseller, the Corrector of the Press, and the diligent Compositor.

Although substantially based on "Ballhorn's Alphabete," a German compilation, which, in the space of a few years, passed through nine editions, the present manual has in several articles been very considerably improved and enlarged. Of the new observations which have been inserted, some may prove useful even when this work shall be consulted by the side of the respective Grammars. With regard to the Asiatic Alphabets, it may be stated, that the continued efforts to obtain trustworthy specimens have, in some instances, led to highly satisfactory results. In preparing the type of the Chinese characters, the lateral "Tones" have been adjoined to the 214 symbols of pronunciation. These additions will enable the student, instructed by native teachers, to remember with greater facility the varying articulation of vowel-sounds.

The publishers entertain the hope, that the present work, an humble attempt to assist in the furtherance of philological pursuits, will obtain the encouraging consideration of competent scholars, whose suggestions, available for future editions, are respectfully solicited.

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# PERSIAN CUNEIFORM CHARACTERS.

There are two main families of Cuneiform Characters which, before the expedition of Alexander the Great, were in use nearly in all Asiatic Countries, subjected to the (Achæmenides) Persian Kings. One of these, the Arian arrow-headed, is here given, and is a pure alphabet of fixed characters, which was made use of by the old Persians, proper, and is now read with tolerable accuracy. The other, however, not yet deciphered with sufficient certainty, was employed, with some modifications, by at least five different nations, the Babylonians, the Assyrians, the Medo-Scythians (the second in the triglot inscriptions of Persepolis and Bisutun), the Susians and the Armenians. Almost in each of these five sorts of characters can be distinguished three styles, the Archaic, the Lapidary, and the Cursive.

							<del></del>
Form	Value	Form	Value	Form	Value	Form	Value
777	a	<b>≥</b> YyY	$\mathbf{t}$	<b>Y&lt;</b> ⊱	IN before i	₹	s (sh)
ŤŤ	i	<b>111</b> >	$\mathbf{t^c}$ before i	<b>E</b> (-	m'before u	Y->-Y	Z
<b>₹</b>	u	777>	t'before u	<b>&gt;</b> <	11	-/<	z', g'
<b>∀</b> ≽	k	<b>Y<y< b=""></y<></b>	h	14	y	<b>⟨≥</b> ⟨	h
<b>&lt;7</b>	q	₩	d	EY	ľ	<b>X</b>	thr (tr)
<b>~~11</b>	kh	<b>(E)</b>	dh		r'	1<	rp, q
<yy></yy>	g	₹¥.	p	*	f	<b>**</b>	d, h
<b>⟨</b> ≧	gh	<b>Y</b> <<	f	-12	V	***	b, u, m, i
<b>₹</b> >	k' ·	<b>E</b> Y	b	E	ç (s)	•	point for separating words.
-	g'	> <b>/</b> //	m				
	k' ·	<b>&gt;Y</b>			ç (s)	•	se

# MEDIAN CUNEIFORM CHARACTERS

Form	Value	Form	Value	Form	Value	Form	Value
<b>&gt;&gt;</b> \	a	<b>≽</b> Y ·	t	<b>=Y=Y</b>	phi	<b>E(1</b> >	vo
- = 1 =	â	<b>E-11</b>	ta	ξ⊧γγ	y	<b>X</b> .	S
<b>}</b>	i	<b>≻</b> /≿	ti	-11<	yu	**	sa
	î	><	tu	<b>≥</b> YYY	yo	EV	su
<b>&lt;</b>	u	EV≥	h	~!\\	r	<b>≥</b> ¶	s'
<b>₹</b> ¥ <b>&gt;</b>	û	12	thi	<b>≻</b> ₩	ra	Ÿ	s'a
	q	> <u>E</u> V	thu	-111<	ri	<b><!---</b--></b>	s'i
ME TAN	qu	<b>&gt;&gt;</b>	p	≽γγγ	ru	Y>	Z
		EV.	pa	<b>*</b> **	ro	**	za
<b>&gt;</b>	ka	<b>=Y=</b>	pi	>=\	lu	*	h
<b>YYY</b> ≥	ku -	<b>&gt;11</b>	pe	<b>⟨</b> }	fi	**	ha
-12	kh	<b>Y&gt;</b>	pu	<b>*</b>	fe	> <b>&gt;</b> \	n
!	kha	₽Ÿ	ph		v	<b>(</b>	ni .
<b>&gt;</b> <	khu	<b>-Y</b>	pha	<b>≥€}</b> }	vu	=11=	m

# ASSYRIAN CUNEIFORM CHARACTERS

Form	Value	Form	Value	Form	Value	Form	Value
<b>洋</b>	a	**	ch	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	n	坐	r
4 器 器 女	a, ya	≥\ #\	t	*	p	₩ ₩	
学 11 次	b	<b>₩</b>	t, s	¥ <b>E</b> Y		<b>E</b> Y <b>(1-#4</b>	) ř rsh
<字 EI </th <th>g, kh</th> <th></th> <th></th> <th>EY</th> <th>ds, z, dsh or j</th> <th>★ ★ ★</th> <th>s</th>	g, kh			EY	ds, z, dsh or j	★ ★ ★	s
<u>=</u> </th <th>) d</th> <th>*</th> <th>ì</th> <th>&gt;Y -&gt;Y</th> <th></th> <th>&gt;\- &gt;\-</th> <th></th>	) d	*	ì	>Y ->Y		>\- >\-	
**************************************	h	<b>V</b>	i, y	<b>&gt;</b> Y	k	Y-	_
****	hu, v, y	<b>≥</b> ₩	i, ü y	**	ı	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	sh
<del>4</del> <1	> u	四	> kh	<b>三</b> Y		禁べ	
***	o v, h, a, r		m, v	<b>₹</b> ₹₹	r	<b>→</b>	a, z
¥< <b>¥</b> <	ch	-\\ -\>	n	77.A 77.A		\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	nue
**		<b>⇒</b>		<b>₹</b>	•	<b>**Y-&lt;</b>	vush

# OLDEST CHARACTERS

I	Arrangement	Hieroglyphics	Hieratic	Demotic	Phænician	Numidian	Early - Hebrew
8	Alĕph	*	*		4 4		+
٦	Bēth	•	$\square$	4	9 9	)	99
٦	$G\bar{\imath}mel$	r			71		7 1
٦	Dāleth		प		49	7	94
П	Hē			5	7	ħ	ョ
1	Vāv	ľ	h		77		*
1	Zăyĭn	}	Ì		7		
		2					
		V	1	٨			
П	Chēth	$\cap$	A		AB	· ))))	日
20	Tēth	×		3	8	U	
4	Yōdh	<u>_</u>	M	27	MM		マス
٥	Kăph	4	<u> </u>	4	774	2 1	눠
5	Lāmědh	^	A	- <b>y</b>	LL4	}	L
2	Mēm	*****	Щ	4	41 44 44	w 4	۳
2	Nũn		A		4 4	,	9
ם	Sāmĕk			Y	my 24	4	
ע	Ayĭn		山 台	2	100	()	υ <b>◇</b>
٥	Pē	9	)		7	)	′ 7
2	Tsādhē				pp		m
ה	Q'ōph	•	Ц	þ	77	7	TP P
٦	Rēsh	6	R	4	9 4	1	9 4
ש	Shīn		ш	in	444		ww
ת	Tāv	*		÷	h +	X+	×+
F		. 8	S	5	(		

OLDEST (	HARA	CTERS
----------	------	-------

Aramaic	Estrangelo	Palmyrenian	Kufic	Old - Hellenic	<b>0</b> ld - Italic	Etrurian			
XX	2	r n x	t	4	AMA	ЯА			
9	コ	Ÿ	٤	<b>3</b> B	<b>3</b> B	♦ ♦     A □   a			
^	7	人	6	1171	(7)	9 A			
4	4	Ч	5	AVA	494	<b>4</b> B b			
7	TI	K	4 4	习旨	3 ) E	$\{K,g\}$			
ו ו	a	7 7	2	FF	a ¬F	ON<\","			
1	(	I	3	I	<i>&gt;</i> Z	$\left\{\begin{array}{c} \mathbf{T} \mathbf{F} \\ \mathbf{Y} + \mathbf{f} \end{array}\right\} \mathbf{t}, \mathbf{d}$			
			<u> </u>	Н	9	<b>33</b> e			
			Z	El		8 f			
Ħ.	77	H.	2	⊟Н	Ð.H	<b>H</b> h			
Ŋ	+	G	4	0	⊙ <b>∋</b>	li			
λ ^		> >	1	> S	11	17.4)			
· y	56	<b>3</b> 3	<u>\</u>	y k	X K	<b>V</b> )			
46	7.	y.	1	1 4	12	m m)			
4 4	于	ゴ	•	w w	М	M W $^{\mathrm{m}}$			
71	<b>L</b> 1	ے .	£	~	7 ~	ии) иг)			
4	M	y コ ち	भेग	+ I	干	71)"			
U	7	y	٤	0	() ⊙	$\Theta \Phi$			
1	4	5 1	व	7	7 [	○ ○ { °			
	77	5	حر	Z	+	7 7 8 P, b			
PT		は	و	φф	904	<b>4</b> ♥ ) r			
4 4		444	3	9 9	4 P	(עטף			
<b>V</b>	L	$\mathcal{V}$	भग	w w	<b>M</b>	s			
p h	7	2	L	4 T	++	<b>Y</b> u <b>V</b> v, u			
			<u>o</u>	Y	<b>\</b>	V v, u			

### HEBREW

Form	Name	Pronun- ciation	Numer value
8	Aleph	Spiritus lenis	1
<b>_</b>	Beth	b bh	2
3	Gimel	g gh	3
7	Daleth	d dh	4
ī	Не	h	5
٦	Vav	w	6
7	Zayin	S soft	7
n	Cheth	ch	8
<b>1</b>	Teth	t	9
•	Yodh	j	10
D, final	Kaph	k kh	20
5	Lamedh	1	30
ħ, final □	Mem	m	40
i, final	Nun	n	50
ם '	Samek	s	60
ヹ	Ayin	guttural •	70
D, final	Pe	p ph	80
3, final	Tsadhe	ss	90
	Q'oph	q	100
ほほうり	Resh	r	200
2	Sin	ŝ	200
2	Shin	$\operatorname{sh}$	300
ת	Tav	t th	400

#### Final-Kaph

with Shva | with Q'amets | with Daghesh and Q'amets |

#### LIGATURES.

בלחים also instead of צל בי

#### NOTES.

The Hebrew Alphabet, like all Semitic alphabets, consists only of consonants, 22 in number, some of which, however, have also the force of vowels. Hebrew is read from right to left. Because at the end of the lines, words cannot be divided, the following dilatable characters (dilatabiles) were employed to help to justify, or fill up the lines; but now the practice is all but obsolete.

#### CONSONANTS.

Notes on Pronunciation.

- N is the softest guttural, an emission of the breath scarcely to be heard, the Spiritus lenis of the Greeks, similar to π, but much softer.
- before a vowel, is our aspirated h (the Spiritus asper of the Greeks); but after a vowel, at the end of a syllable, it is a guttural, and, at the end of words, it often supplies the place of a vowel.
- י 1) is a guttural g, accompanied by a grating or rattling sound; 2) a softer breathing like s. In reading and transcribing hebrew words, it is now usual to omit s and s, e. g. אַלָּדְּעָּ
- is the harshest guttural, like the German ch as pronounced by the Swiss, or the Spanish x and j.
- is pronounced in Hebrew more like a rattling guttural, than as a pure lingual, and partakes of both sounds.
- and were originally but one and the same letter, as they still are when written without points; but as in some words this letter had a softer sound, similar to s, this two-fold pronunciation is distinguished by the grammarians by the diacritical point: works, and works.
- is the English z.
- And are strongly articulated sounds, produced by a compression of the lower organs of the mouth; the two first, therefore, differ essentially from and which are equivalent to our t and k, and are often aspirated.

The six consonants reprise have a two-fold pronunciation: 1) a harder and more slender sound (tenuis), like our b g d k p t, and 2) a smoother sound accompanied by a soft aspiration. The harder sound is the primeval; it occurs at the beginning of words and syllables without a vowel preceding immediately, and is indicated by a point (Daghesh lene) in those six consonants. They are aspirated after a vowel immediately preceding; in manuscripts this is indicated by the Raphe (-), but in printed books the aspiration is shown by the absence of the Daghesh.

CLASSIFICATION OF THE CONSONANTS.

- a) According to the organs of speech by which they are pronounced:
  - 1) gutturals (gutturales) א ה ע ה א
  - 2) palatals (palatinae) p > : -
  - 3) linguals (linguales) מן and ז and ז and ז לן
  - 4) dentals (dentales) שצ ס ש
  - 5) labials (labiales) או מב ה

The partakes of the 1. and 3. classes.

- b) According to their sound:
  - 1) aspirated consonants (aspirantes): אהעה
  - 2) soft consonants (molles): liquids כן מיני אל semivowels זיי
  - 3) sibilants (sibilantes): אים ש בי
  - ש and בגרכפת and בגרכפת and בגרכפת

#### VOWELS.

That the scale of the five vowels ă ĕ ĭ o oo is derived from the three primitive vowels ă ĭ oo, is to be seen much more distinctly in the Hebrew and the other Semitic languages than in other languages. The ĕ has been formed by ă + ĭ, the o by ă + oo, and, properly speaking, both are contracted diphthongs: ê = ai, ô = au. — The full vowels formed by this process are the following, arranged according to the three principal vowels and to their prosodical quantity:

Vowel ă (🚷)

- T Q'amets, à ā
- Patach, a.

Vowel ĕ - ĭ ()

- Tsere (with Yodh), ê
- 🐤 Chireq (magnum), ī
- Tsere (without Yodh), ē (è)
- Seghol, ĕ, è (the latter is also written •:)
- Chireq (parvum), ĭ (i).

Vowel o - oo(1)

- † Cholem (magnum), ô
- 3 Shureq, ū
- Cholem (parvum), ō (ò)
- Q'amets-chatuph, ŏ
- · Q'ibbuts, ŏŏ (ōō).

The vowels, or vowel-points, are placed under the consonants after which they are pronounced (7 ra); but the Patach, placed under a guttural at the end of a word, is pronounced before this guttural, are ruach, in which case it is named Patach furticum. The Cholem (without Vav) is placed above the consonant on the left side: 5ro. The figure is to be pronounced sometimes ov, the being consonant, and the - preceding it; sometimes vo, the Cholem being read after the Vav. It is more accurate to distinguish thus: i ov, i vo, † ô; likewise also † (Shureq) and † (Vav with Daghesh). As, however, : (Shureq) is readily discernible, because a vowel neither can precede nor follow it, only this form is made use of.

In opposition to the vowels

- : Shva (Sheva) indicates the absence of a full and distinct vowel. Therefore
  - 1) placed under a consonant concluding a syllable, it indicates the complete absence of a vowel and serves to divide the preceding syllable from the following (Sheva quiescens). It is not made use of, however, when the consonant concluding the syllable at the same time concludes the word, except in the case of the Final Qoph (A), and those words ending in two consonants, when each of them is to be furnished with a Sheva, e. g.
  - 2) it represents a slight and indistinct vowel, as it were only the onset or beginning of a vowel (Sheva mobile).

The  $Sh^eva$  mobile is pronounced somewhat more clear and distinct in the so called Chateph-vowels (Aut rapidum), joining a short vowel to the  $Sh^eva$  simplex; in opposition to which it is also named  $Sh^eva$  compositum. There are three Chatephs:

- -: Chateph Patach, half ă
- ... Chateph Seghol, half ĕ
- T: Chateph Qamets, half o.

#### READING-SIGNS.

There are some reading-signs which have close connexion with the vowels and probably were introduced at the same time. Amongst these is to be noticed the diacritical point of nad . Meeting together with the Cholem (in), only one point is made use of which represents both; therefore is to be pronounced so, if no other vowel-point is added; and osh, when the preceding consonant is unpointed, e. g. Nin sone, with mosheh.

More frequently we see a point placed in the consonant to indicate in general a harder pronunciation. There are three cases to be distinguished, viz.: Daghesh forte, doubling the consonants.

Daghesh lene, hardening the consonant; it stands only in the six mutae: הבבבב in the above named cases; otherwise the point occurring in these consonants must be a Daghesh forte.

Mappiq, indicates that those consonants, which are also used as vowels, are then to be pronounced as consonants; in modern printing it is made use of only in the 

at the end of the words.

In opposition to the point hardening the consonant, a little stroke standing above the consonant indicates his softer sound. This stroke called

Raphe ( ) is now almost out of use, and is only employed in order to indicate expressly the absence of a Daghesh or Mappig.

#### ACCENTS.

The general design of the accents is to indicate the rhythmical members of the verses in the Old Testament. In doing this, they perform a twofold duty; for the accents mark at one and the same time partly the logical relation of each word to the whole sentence, and partly the accented syllable of each single word. In the first case the accents supply the punctuation, in the latter they are signs of tone. — As signs of tone, the different accents are equivalent, because there is in Hebrew only one kind of accentuation. In most words, the last syllable is accented, more rarely the last but one. — As signs of punctuation, their use is more complicated, because they not only separate words, like our points, commas and colons, but also join one to the other. Therefore they are divided in Distinctivi and Conjunctivi. In the following list they are arranged not according to their grammatical value, but according to their being placed below the consonants or above them, in order to give a more facile view of them.

ACCENTS PLACED UNDER CONSONANTS.

Silluq only at the end of the verse, therefore always joined with: Soph-pasuq, which stands between the single verses.

- Athnach, mostly in the midst of a verse
- Yethibh (always to the left of the vowel).
- Tebhir
- Tiphcha initiale
- Merkha
- Double Merkha
- Munach
- Mahpakh (to the right of the vowel)
- Darga
- y Yärach
- , Tiphcha finale.

ACCENTS PLACED ABOVE CONSONANTS.

- ∴ Segholta
- : Zaqeph-qaton
- " Zaqeph-gadhol
- \* Rebhia
- ~ Zarga
- ` Qadma
- ) Pashta
- : Shalshelet
- P Paser
- ۹۶ Qarne-phara
- <sup>9</sup> Great-Telisha
- 9 Little-Telisha
- ' Gäresh
- " Double-Gäresh.

ACCENTS CONSISTING OF TWO PARTS BELONG-ING TOGETHER, THE ONE ABOVE, AND THE OTHER BELOW CONSONANTS.

- —≤ Merkha mahpakhatum
- Merkha sarqatum
- Mahpakh sarqatum.
- : Soph-pasuq, separating verses.
- ! Pesiq, between the words.
- Maqqeph, hyphen, aloft, between the words.
- Metheg, sign of tone (to the left of the vowel).

#### NUMERALS.

There are no numerical ciphers in Hebrew; but consonants are used instead of them. The units are expressed by x-z, the tens by x-z, x-z, x-z. The numbers 500—900 sometimes are expressed by the five final letters

sometimes by r = 400 with addition of the other hundreds, e.g. r = 500. In compound numbers, the greater is placed first, e.g. r = 11, r = 121. The number 15 is written with r = (9+6), instead of r = 15, because the name of God r = 15 begins with these letters; and for the same reason, 16 is written r = 15 instead of r = 15. The thousands are expressed by the units, superscribing two points, e.g. r = 1000.

#### ABBREVIATIONS.

- 'A stroke aloft to the left of the consonant, e. g. 'א', denotes that this consonant serves as a numeral. By the side of the last consonant of a word, e. g. 'כמורה (במורה) it marks an abbreviation.
- "Two strokes above a word, e. g. ", indicate that each of these letters stands for a separate word abbreviated.
- o or \* in copies of the Hebrew Bible refer to the readings placed in the margin or at the foot of the page. The first is of Masoretic, and the other is of modern origin.

# RABBINIC

# GERMAN-RABBINIC

Form	Name	Pronunciation	Form	Pronunciation
ή .	Aleph	Spiritus lenis	n	a
3	Beth	bh b	ב	b
)	Gimel	gh g	ā ,	v f
			7	$egin{array}{c} \mathbf{g} \\ \mathbf{d} \end{array}$
1	Daleth	dh d		h
ָר	He	h	1	v u o
1	Vav	W	11	w
;	Zayin	S	<b>:</b>	s
ח	Cheth	ch guttural	Ľ.	cch
٥	Teth	t	ں ،	t
1	Yodh		n final 7	i j e short
		У	), final 7 5	ch
, final 7	Kaph	ch k	3	1
5	Lamedh	1	N, final p	m
n, final D	Mem	m	), final	n
, final	Nun	n	٥	S SS
Ď.	Samek	S	ע	e long
			D, final $\tilde{J}$	p ph pf v
ע	Ayin	guttural	3, final	ztz
D, final 9	Pe	ph p	ק -	k ck q
5, final T	Tsadhe	Z	7	r
ק	Q'oph	k	מ	s sh
7	Resh.	r	л	t
Б	Shin Sin	sh s	Ţ1	tt
			DIPHTI	HONGS.
ת	Tav	th t	ויר ei, ויר ei, ויר	eu, 'i ö ü german

# HEBREW RUNNING-HAND

E	orm	Name	Pronun-	Numerical	Ligatures
Polish	German		ciation	value	2.8000100
Н	K	Aleph	<b>%</b> a	1	
څ	9	Beth	<b>D</b> b	2	<b>≈</b> = <b>y⊃</b> be
<i>&gt;</i>	۶	Gimel	J g	3	אל בה = 8
3	3	Daleth	٦ d	4	
ล	ふ	Не	ה h	5	$\wp = \mathfrak{U}$ ng
1	,	Vav	) w	6	<b>9</b> = 71 nd.
3	2	Zayin -	i s	7	שר וה ש ש nh
<b>n</b>	L L	Cheth	□ ch	8	
6	6	Teth	r t	9	آن = أن nf
1	,	Yodh	<b>y</b>	10	_v = 11 nn
$\mathcal{S}$	ے	Kaph	$\sum_{i}$ cch	20	
	Y or C	Lamedh	5 1	30	, s = 13 nw
×	×	Mem	t m	40	ა — <b>''</b> nj
	ا	Nun	) n	50	zd <b>کت</b> علاق
0	0	Samek	D ss	60	
or 8	or 8	Ayin	ÿ e	70	$\beta = 12 \text{ zw}$
ව	Э	Pe	<b>5</b> p	80	iz zi
ô	ō З	Fe	<b>5</b> f	90	Y I with work of al
3	3	Tsadhe	C or Z	100	I with mark of ab- breviation, in use at the
1	2	Q'oph	ァ k	200	end of certain words.
•	~	Resh	٦ r	300	
Q	Q	Shin	<b>v</b> sh	400	
V	٧	Tav	n th	500	

### FINAL LETTERS.

	Po	lish.				Germa	n.	
7	_	٦	$\operatorname{cch}$		7	=	٦.	cch
२	=		m		9	==		m
(	==	ì	n		(	==	1	n
ß	==	F	f	68	S	==	F	f
P	=	r	c z	L	3	===	V	c z

### **SAMARITAN**

Form	Name	Pronun- ciation	Numerical value
N.	Aleph	Spiritus lenis	1
2	Beth	b bh	2
Υ	Gimel	g gh	3
7	Daleth	d dh	. 4
¥	He	h Spir. asper	5
*	Vav	w v	6
A	Zayin	s ds	7
Ħ	Cheth	ch hh	8
$\nabla$	Teth	t	9
π	Yodh	y	10
4	Kaph	k ch	- 20
2,	Lamedh	1	30
W.	Mem	m	40
<b>4</b> 7	Nun	n	50
Ħ	Samek	s	60
$\nabla$	Ayin	y hebrew	70
3	Pe	p ph	80
m	Tsadhe	ts	90
8	Q'oph	k	100
9	Resh	r	200
w.	Shin	sh	300
A	Tav	t ·th	400

#### NOTES.

The Samaritan is a Semitic language. Therefore, the alphabet consists only of consonants (22 in number) and is read from right to left. As in this language words cannot be separated at the end of the lines, the two letters ending the last word are separated from the others and placed at the end of the line; but in printing this is generally avoided by diminishing or enlarging the spaces between the single words.

Save some points and scanty orthographical signs, there are in Samaritan no vowel-marks, accents or other diacritical signs as in Hebrew. Therefore we are somewhat in the dark about the pronunciation of the consonants and vowels and it can be acquired only by comparison with the Syriac and the Hebrew.

#### VOWELS.

There are no vowel-marks as in other Semitic languages. However, to supply this want and to indicate somewhat the pronunciation, some consonants are used as vowels, viz.:

Of two consonants beginning a word, the first is pronounced as if it were a slight and indistinct yowel, similar to the Hebrew Shwa.

#### DIACRITICAL SIGNS.

The only discritical sign is a stroke over the consonant (e.g.  $\nearrow$ ) serving to distinguish two different words written in the same manner, or two different forms derived from one and the same root, or to indicate some letter added or omitted. When placed over  $\prod$  or  $\nearrow$ , the stroke indicates that these letters are real consonants, not representing vowels.

#### PUNCTUATION.

-A point is put by the side of the final letter of a word. Besides this, the following signs have been introduced by the transcribers:

- or or otat the end of a sentence,
- \*\* (also \*) at the end of part of a sentence, like our colon,
- = or —< \* more seldom —• tetc., or compound —< \* = etc. at the end of a longer sentence or section,
- or similar signs, sometimes again and again repeated, between the end of one section, paragraph or chapter, and the beginning of the other.

The numbers are written as in Hebrew (see under).

### **SYRIAC**

Name	uncon- nected	Fo connect- ed with a preced- ing letter	connect- ed with both	connect- ed with a follow- ing letter	Pronun- ciation	Numer. value
Olaph	1	Ļ			Spiritus lenis	1
Beth	9	þ	J	O O	b or v	2
Gomal	7	7	1	./	g	3
Dolath	?	*			. d	4
Не	ឲា	<b>a</b> .			h	5
Vau	0	d			W or V	6
Zain	1	ŀ			Z	7
Cheth	-44	<b>_</b>	▲	*	ch	8
Teth	<u>ئ</u>	<i>ڪ</i> ر.	₹⁄	3	t	9
Yud	•	•	•	•	у	10
Koph	<del>y</del>	<b>y</b>	2	ء	ch	20
Lomad	0	<i>"</i>	2	7	1	30
Mim	ox	×	रू	حد	m	40
Nun	·	_	1	נ	n	50
Semcath	8	<u> </u>	ಹ	ಬ	s	60
Ee	<b>%</b>	<i>«</i>	2	2	z as in hebrew	70
Pe	و	ے	<u>a</u>	9	p or f	80
Tsodé	ડ	.5			ts or z	90
Quph	ف ا	٩	۵	٥	q	100
Rish	•	÷			$\mathbf{r}$	200
Shin	•	•	•	•	sh	300
Tau	2	Δ.			th or t	<b>4</b> 00

#### VOWELS.

The Syriac is written from right to left. — The vowels are expressed by diacritical signs or some marks in imitation of the greek; the latter of which are now mostly in use. In former times both kinds were employed promisenously. ployed promiscuously.

Fig	ure	Name	nun- tion.
Syriac.	Greek.		Pro
$\div$	<u>y</u> <u>y</u>	Pethocho	ă
- or -	<del>+</del> <del>-</del>	Rebotzo	ĕ
	= =	Chebotzo	ĭ
, or .	-	Zekopho	o
d. d. d	<u>م &gt;</u>	Etsotso	00

#### DIACRITICAL SIGNS.

- Ruchoch, a point below an aspirated letter to indicate that it is to be aspirated.

  Qushoi, a little point over an aspirated letter to indicate that it is not to be aspirated.

  Ribui, two points placed horizontally above the word to indicate the plural
- the plural.

  Marhetono, a line above a letter
- Marhetono, a line above a letter between two consonants to indicate the absence of a vowel. Besides, this line signifies 1) a number, 2) an abbreviation, 3) an exclamation.

  Mehagyono, a line below a letter, to show that though without a vowel it is to be pronounced as if it had one.
- if it had one.
- Linea occultans, a line placed be-low a letter to denote that it is to be mute or omitted in pronunciation.

#### PUNCTUATION.

- marks a single part of the premise of a sentence.
   marks the end of a premise; or, it is sign of interrogation.
   marks the single parts of the conclusion of a sentence; or, larger interpretations. interrogations.
- or :: at the end of a period.

#### NUMERICAL VALUE.

NUMERICAL VALUE.

The consonants of the alphabet supply the numbers from 1 to 400; in compound numbers, the greater precedes. Within 500—900, the tens from 50—90 are denoted by a point standing aloft. The mark under a unit denotes the thousands, the tenthousands, the product of the thousands multiplied by the tenthousands. In writing fractions, the numerator is denoted by a little stroke going from left to right, placed above the denominator. denominator.

#### LIGATURES.

Double-Gomal. ≤ ≤ Olaph-Lomad. v × v × Lomad-Olaph. W W Double-Lomad.

# SYRIAC

Cut in the printing-office of B. G. Teubner in Leipzig conformably to original drawings by Professor Tullberg of Upsala and Professor Bernstein of Breslau.

Form	Pronun- ciation	Name	Form	Pronun- ciation	Name	Form	Pronun- ciation	Name
1 / 2 J	at or Spirit. lenis.	Olaph	29 <b>\</b> 30 <b>\</b>	gh	Gomal	57 J 58 J	$\begin{cases} \mathbf{z} \\ (\mathbf{gr.} \zeta) \end{cases}$	Zain
3 J 4 a 5 a 6 a	)             		31 ? 32 : 33 , 34 •	d and dh		59 60 61 62	kh	Cheth
7 3 8 3 9 1 10 5 11 5 12 5 13 3	and bh	} Beth	35	} d	> Dolath	63 b 64 b 65 b 66 b 67 b 68 b 69 b	t	Teth
14 \( \) 15 \( \) 16 \( \) 17 \( \) 18 \( \) 19 \( \)	} bh		42 ? 43 . or 44 . 45 . 46 .	dh		70 <b>\</b> 71 . 72 . 73 . 74 \	ì	Yud
19		Gomel	47 0) 48 0) 49 0) 50 0) 51 0)	h	He	76 ± 77 ± 78 ⊃ 79 ⊃		
24 '\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	g	Gomal .	52 oi 53 oi 54 oi 55 o 56 o	\ \{ \text{wvu}	Vau	80 7 81 3 82 7 83 7 84 3	c and ch	<b>K</b> oph

			\$	SYRIA	C			
Form	Pronun- ciation	Name	Form	Pronun- ciation	Name	Form	Pronun- ciation	Name
د 85٠	)		115 🗪			145	) ·	
86 <b>5</b>			116 90	$\mathbf{s}$	Semcath	146 🙇	brace sh	Shin
צ' 87	} c		117 90			147 🗻		•
88 <del>j</del>			118 🛕			148 1		
89 <b>j</b>	)		<b>119 \( \)</b>			149 🔈	t and	
ج 90		Koph	120 🔪	ee (bobn	Ee	150 <b>L</b>	th	,
ج 91			121 🛕	(hebr. ያ)	De	151 🛦		
و 92			122 🔌			152 L		
<b>خ</b> 93	( cn		123 🔌			153 📐		
94 7			124 🔊 )			154 🗘	} t	. Tau
95 <b>7</b>	]	·	125 🖭	p and		155 🌣		
96 🔪			126 🗷	ph(f)		156 L		
97 🔪		-	ر ھ 127		Phe	157 L		
98 况	$\begin{bmatrix} 1 \end{bmatrix}$	Lomad	128 فع	} р		158	$\downarrow$ th	
99 📜			129 غ	T'		159 🗘		
100 🖔			( ف	h ph f		160 🏡	J	
101 🖔			131 <b>ठ</b>	<b>'</b>			GATURI	ES.
102 🗴			$^{132}$ $_{ m J}$			161 🔌	al	Olaph-
103 🗴			$^{133}$ $\dot{\boldsymbol{J}}$	Sharp S	Tsodé	162 💹		Lomad
104 🕉	$\mathbf{m}$	Mim	134 j	or SS		163		
105 🗴	7	•	135 🐧			164	-	
106 )0		•	136 🚨			165		Double-
107		•	137	k	Quph	166	gg	Gomal
108			138 🚨		-	167		
د 109			( غـ 139			168	11	
110 1	n	Nun	140 5			169		
111			141 <b>;</b>	r	Rish	1710	gv	Gomal- Vau
112						171		
114 🕿	)	Semcath	143 😮 )	l ob	Shin	172 0	vn	Vau- Nun
, 114 😘	s	Semeath	144	sh	Sum	173 😺		

## SYRIAC

			SIRIAC	
Form	Pronun- ciation	Name	Vowels, Accents and Orthographical Signs	Points and Numbers
174 <b>~</b> 175 <b>~</b>	in	Yud-Nun	VOWELS AND ACCENTS.  203  a Pethocho	POINTS. 224 . 229 .
176 JJ 177 JJ 178 XX 179 XX 180 &\ 181 &\ 182 &\	la	Lomad- Olaph Lomad- Teth	204 ;	225 _:   230 :
183 <b>4</b> \(\) 184 <b>1</b> \(\) 185 <b>1</b> \(\) 186 <b>1</b> \(\) 187 <b>1</b> \(\) 188 <b>1</b> \(\)	11	Double Lomad	211	NUMBERS.  Form   Value
189 🔌 190 🔌 191 🔌 192 🔌	lee	Lomad- Ee	ORTHOGRAPHICAL SIGNS.  215 Ribui 216 - Mehagyono	6 7 8 4 9 10
193 🔊 194 🔊 195 🖎 196 🗞	lt :	Lomad- Tau	217 - Marhetono 218 Qushoi, Ruchoch	20 30 30 40 40 40 50 90 60
197 ထ	mn	Mim- Ņun	219 Little hooks at the beginning of a word 220 at the end of a	\( \) 70 \( \) 80
198 Ju	na l	Nun- Olaph	221 word	3 90 100
200 🗴 }	ssn	Tsodé- Nun	222 - Strokes between the single letters to adjust the lines	; 200 300
201 💥 )	ssg	Tsodé- Gomal	1.	1 400 1 1000

# ARABIC

			Fo	rm			
	Name	Unconnected	Connected with a preced- ing letter	Connected with both	Connected with a follow- ing letter	Pronunciation	Numerical value
4	Elif	1	L			Spir. lenis	1
3	Ba	ب	ب	٠	ڊ ا	b	. 2
	Ta	<u>ت</u>	<u> </u>	Ä	ڌ	t	400
	Tha	ث	ث ا	*	ڎ	th	500
r	$\operatorname{Jim}$	7	~	₹I	٠ ج	j	3
	Hha	てって	<i>₽</i>	Z	_	hh	8
(d)	Cha	خ	<i>&gt;</i>	这	خ	ch	600
	Dal	v	ج ج ب			d	4
2	Dhal	ن	ن.			dh or ds	700
A	Ra	,	7 5			$\mathbf{r}$	200
-g Joseph	Zay	,	<b> </b>			Z	7
	Sin	Ú	ĺ m	m	<b></b>	s	60
2	Shin	m	m	ش	شد	sh	300
1	Ssad	ص	ص	<u>ھ</u>	مِ	SS or Ç	90
	Ddad	ض	ض	ض	ۻ	d or dd	800
6	Tta	ط	ط	٠ ط	ط	tt or th	9
	Zza	، ظ	ظ	ظ	ظ	ZZ	900
0	Ain	ع	ع	2	2	Spir. gutt.	70
	Ghain	غ	غ	ż	غ	gh	1000
Δ	Fa	ف	ف ق ك	غ	ف ا	f	80
P	Qaf	ق ك	ق	ä	ۊ	k	100
K	Kaf			ڪ ک	5 5	k soft	20
1.	Lam	J	7	1	3	1	30
200	Mim	۴	•	•	A	m	40
N	Nun	ن	ۍ	ند	ذ	n	50
	Ha	s Final 8	* Final *	8	ھ	h	5
F	Waw	,	,			w	6
1	Ya	ی	5	<b>.</b>	ڍ	y, i	10

ORTHOGRAPHICAL SIGNS

#### VOWELS.

Fatha, ă ä ë - Kesre, ĭ ë - Damma, oo o

At the end of the substantives the vowels are doubled to indicate the case, viz.:

This is called Nunation, because, in pronouncing, Nun is added to the vowel.

DIPHTHONGS: ai as in german.

#### ORTHOGRAPHICAL SIGNS.

- Jezma, separating syllables, is written over the final consonant of all shut syllable and indicates, that the syllable is finished and the consonant to be pronounced with the preceding vowel; it corresponds to the Shwa quiescens of the Hebrew.
- Teshdid, mark of doubling. The final consonant of a syllable being the same as that beginning the following one, this consonant is written only once, but marked with the sign —, which corresponds to the Hebrew Daghesh forte. In African manuscripts it is written ν or λ.
- Hamza is placed generally above the Elif, when this is used as a consonant and furnished with a vowel; when this vowel is a Kesre, the Hamza is placed beneath; sometimes also it stands above the Y. In Kufic Korans it is supplied by a little green stroke, in Moorish or African manuscripts by a thick green or yellow dot.
- wesla, joining-mark. The Elif, at the commencement of a word, is sometimes in pronunciation absorbed by the final vowel of the preceding word. In this case, the vowel of the Elif is elided and marked by the Wesla.
- Medda stands above an Elif pronounced by Fatha and followed by a Hamza; it indicates the prolongation of the a. It is placed, also, above an Elif at the commencement of a word, or instead of an omitted Elif. Besides, this sign is a mark of abbreviation.

  PUNCTUATION.

There are no signs of punctuation in Arabic, only in the Koran the verses are separated by . This sign, however, or 'or '' or a red dot, is employed also in other books at the end of a section. In manuscripts, sometimes, a new section begins with a word written in red colour; in manuscript dictionaries a red line is placed above each catch-word.

#### CIPHERS.

Formerly, the Arabs, like other oriental nations, used the letters of the alphabet to express numbers; at a later period, however, they adopted the following 10 special figures, called by us Europeans the Arabian ciphers, by the Arabs themselves the Indian ones.

1 P P F 0 9 V A 9 • 1 2 3 4 5 6 7 8 9 0

Regarding their composition and value they accord with our numerals, which are taken from them, whereas the consonants expressing ciphers are written from right to left, viz. [14] (1861).

#### ARABIC LIGATURES

ج ج ج ج	Ba-Jim	ثخ	Tha-Cha
इं इं इं	Ba-Hha	*	Jim - Jim
**	Ba-Hha-Jim	3.	Jim-Hha
بخ بخ خ	Ba - Cha	ج ج	Hha-Jim
تج تج تبج	Ta-Jim	- A.	Hha - Jim - Jim
تج نتج تد تد خ تح	Ta-Hha	<i>A</i> :	Hha-Jim-Hha
تختخت	Ta - Cha	z 3	Hha-Hha
چڅ	Tha-Hha	N. C.	Hha-Hha-Jim

### ARABIC LIGATURES

	1	1	1
خ چ	Hha-Cha	圣圣圣	Kaf-Cha
خ چ	Cha-Jim	2 2	Lam - Elif
ج ج ج ج	Cha-Hha	<b>基本等</b>	Lam-Jim
سج سج سے	Sin-Jim	<u>*</u>	Lam-Jim-Hha
سے سے سے	Sin-Hha	子子子子	Lam-Hha
سى بىنى سىز سى بىنى سىز سىز	Sin-Cha		Lam-Hha-Jim
شج شج شج	Shin-Jim	\(\bar{\partial}{\partial}\)	Lam-Hha-Hha
	Shin-Hha	是 法 法	Lam-Cha
شخ شخ	Shin-Cha	,	Lam-Cha-Jim
कंट कंट कंट कंट	Ssad-Jim	W W SW	Lam-Mim-Hha-Jim
कर कर कर क	Ssad-Hha	<b>3</b>	Lam - Mim - Hha - Hha
व्यहं क्ष्यं क्षु	Ssad-Cha	لی لی	Lam-Ya
***	Ddad-Jim	الله الله الله الله الله الله الله الله	Mim-Jim
<b>5</b> 12 <b>5</b> 10	Ddad-Hha	\$\frac{1}{2} \times \frac{1}{2}	Mim-Hha
李李	Tta-Hha	₹°°	Mim-Hha-Jim
* *	Ain-Jim	₹"	Mim-Hha-Hha
· & &	Ain-Hha	<u>ئ</u> د ئىد ئىج	Mim - Cha
<u> </u>	Ghain-Jim	تخہ خخہ خخ نجہ نجے	Nun-Jim
غے نحے	Ghain-Hha	نح نح نح	Nun-Hha
نج بمج نج	Fa-Jim	र्झ झं	Nun-Cha
نح فح فح فح	Fa-Hha	幸 幸	Ha-Jim
نج بخج نج نح بخد بخج فنج نحد بخد بخخ فنج نخد بخد بخخ فنج	Fa-Cha	<b>₹</b>	Ha-Hha
نى	Fa-Ya	益 益	· Ha-Cha
چ جے ہے۔ چ تے ہے۔ کا کا کا	Qaf-Jim	ø	Ha-Mim
تح تح	Qaf-Hha	是条型器	Ya-Jim
نتح نتح	Qaf-Cha	3	Ya-Jim-Hha
K K	Kaf-Elif	يح يح يح	Ya-Hha
کج کج کج ک کمک کے	Kaf-Jim	3	Ya-Hha-Hha
كح مكح كح	Kaf-Hha	국 국	Ya-Cha

# AETHIOPIAN AND AMHARIC

							$\mathbf{F}$ o	rm							nun ion
Name	with	ă	with	û	with	î	with	â	with	ê	with	ĕ	with	ıô	Pronun- ciation
Hoi	U	ha	ሁ	hu	Ų.	hi	Ч	ha	Ų	he	IJ	he	U	- ho	h
Lawi	Λ	la	$\Lambda$	lu	$\Lambda_{\bullet}$	li	4	la	$\Lambda_{\mathbf{b}}$	le	4	le	$\Lambda$	lo	1
Haut	Ψ	ha	ф	hu	Ψ.	hi	Ψ	ha	Ψ	he	Ж	he	Ψ	- ho	h
Mai	0	ma	0	mu	OZ.	mi	09	ma	02	me	80	me	P	mo	m
Saut	W	sa	W	su	W.	si	W	sa	Щ	se	$\mathbf{m}$	se	w	80	$\mathbf{S}$
Rees	L.	ra	4	ru	4	ri	Ln	ra	L	re	C	re	C	ro	r
Sat	Ų	sa	Ϊ́Τ	su	Ď.	si	ц	ßâ	Ъ	se	ÿ	se	Ļ	80	s
*Shat	ñ	sha	产	shu	ĬΪ,	shi	污	sha	占	she	$\Gamma$	she	ř	sho	sh
Kaf	Ф	ka	Ф	ku	Ф	ki	ቋ	ka	Ф	ke	Ф	ke	ф	ko	k
Bet	$\mathbf{\Omega}$	ba	$\mathbf{U}$	bu	N,	bi	J	ba	$\mathbf{U}$	be	<b>n</b>	be	U	bo	b
Tawi	ተ	ta	Ŧ	tu	4	ti	T.	ta	T	te	Ť	te	Ť	to	t
*Tshawi	干	tsha	F	tshu	Ŧ	tshi	于	tsha	Ŧ	tshe	干	tshe	Ŧ	tsho	tsh
Harm	4	ha	<b>4</b> .	hu	- <u>'</u>	hi	-4	ha	7	he	喔	he	40	ho	h
Nahas	4	na	<b>7.</b>	nu	2	ni	4	na	Ł	ne	7	ne	5	no	n
*Gnahas	7	gna	ጙ	gnu	፟፟ጟ	gni	4	gna	Z	gne	3	gne	<b>4</b> °	gno	gn
Alf	አ	a	ኡ	u	ለ	i	ላ	а	ኤ	е	አ	е	አ	0	a
Kaf	'n	ka	m.	ku	n.	ki	r <sub>1</sub>	ka	$\Omega$	ke	'n	ke	Y	ko	k
*Chaf	'n	cha	Tr	chu	$T_{\bigcap_{n}}$	chi	ኻ	cha	Th.	che	Ŋ	che	T	cho	ch
Wawi	Ф	wa	Φ.	wu	<b>P</b>	wi	P	wa	\$	we	<b>O</b> r	we	<b>Q</b>	wo	W
Ain	Ŋ	a	다	u	Ŋ.	i	O <sub>2</sub>	a	U <sub>Z</sub>	е	Ċ	е	Q)	. 0	ע
Zai	H	za	H	zu	H.	Zĺ	H	$\mathbf{z}$ a	Н	ze	H	ze	H	20	Z
*Zshai	H	ja	Ŧ	ju	Н,	ji	H	' ja	Ж	je	H	je	H	į jo	j fr
Yaman	P	ya	P	yu	P.	yi	P	ya	Po	ye	.P	ye	P	yo	y
Dent	ይ	da	P.	du	P.	di	P	da	P.	de	P	de	P	do	d
*Jent	P,	ja	真	ju	異	ji	P	ja	臣	je	ድ	je	P	jo	j
Geml	2	ga	7	gu	2	gi	7	ga	3	ge	7	ge	7	go	g
Tait	M	ta	W		M.		M	ta	M		P	te	U	to	t
*Tshait	m	tsha	M.	tshu	M.	tshi	m	tsha	TT	tshe	政	tshe	M	tsho	tsl
Pait	8	pa	8	pu	8	pi	8	pa	8	pe	R	pe	8	po	p.
Tzadai	8	tsa	8	tsu	8	tsi	8	<b>t</b> sa	8		8	tse	8	tso	ts
Tsappa	A	tsa	B.	tsu	见	tsi	A	tsa	星	tse	Ą	tse	<b>6</b>	tso	ts
Aff	4	fa	Ĭ	fu	私	fi	4.	fa	Z <sub>o</sub>	fe	4.	fe	B.	fo	$ \mathbf{f} $
Pa	T	pa	F	pu	T	pi	T	pa	T	pe	Ť	pe	T	po	$ \mathbf{p} $
Φο kua •••• hhua ••• kua	4	k h	kui hui	ентн Ф <b>Х</b>	HONG kua hhua kua	s. <b>ቁ</b>	, hh	ue •	ው ኍ ዅ	kue hhue kue	hari righ ted b lang hari orde cons	c are t. The oy:—T uages c, ho ers of sisting	read f word The alp is sylla wever, letters	and the rom less are see habet of bic; the has (each orms of	eft tepara f bot e Am seve orde r cha

# **AETHIOPIAN**

Cut in the printing-office of F. A. Brockhaus in Leipzig under the direction of the German Oriental Society.

Wi	th ă	W	ith û	w.	ith î	W	th â	Wi	th ê	Wi	th ĕ	Wi	th ô
V	ha	U-	hû	<b>4.</b>	hî	7	hâ	Z	. hê	บ	he	v	hô
Λ	la	٨٠	lû	٨.	lî	1	lâ	b	lê	A	le	No	lô
ф	ḥa	ሎ	ḥû	ሐ	þì	ሐ	ḥâ	њ	ḥê	Ъ	þе	h	ḥô
Ø₽	ma	øD•	mù	øZ.	mì	சு	mâ	øz	mê	go	me	<b>q</b> p	mô
w	<b>'s</b> a	w	ŝû	Щ.	Ŝî	Ч	ŝâ	w <sub>b</sub>	\$ê	p	se	r	ŝô
ረ	ra	4	rû	6	rî	6	rà	6	rê	C	re	Co	rô
ለ	sa	ሱ	sù	ሰ	sì	ሳ	så	ሴ	sê	ስ	se	ስ	sô
ф	qa	<b>ķ</b>	qù	<b>4</b>	qî	ф	qâ	ф	qê	ф	qe	F	qô
n	ba	U-	bù	n.	bì	Ŋ	bâ	B	bê	า	be	n	bô
ተ	ta	卡	tù	t:	tì	办	tâ	古	tê	ナ	te	P.	tô
1	<u>h</u> a	ゅ	hû	7	<u></u> hî	3	<u>ḥ</u> â	3	hê	4	'nе	P	'nô
7	na	7.	nú	Ž	nî	G	nâ	Z	nê	3	ne	q	nô
አ	-a	ሉ	-ù	<b>ሉ</b>	-ì	h	-à	ኤ	-ê	ħ	-e	k	-ô
h	ka	ኩ	ků	'n.	kî	h	kà	h	kê	'n	ke	h	kô
Ø	wa	Ф.	wù	<b>P</b>	wî	P	wà	B	wê	Ø•	we	p	wô
0	a	0-	<b>'</b> ù	O <sub>L</sub>	ì	9	<b>'</b> å	o <sub>z</sub>	°ê	Ò	<b>'</b> e	P	ô
H	za	It	zù	H.	zì	H	zâ	Н	zê	H	$ze_{\epsilon}$	Н	zô
P	ya	f	yû	P.	yì	2	yà	Po	yê	e	ye	P	yô
ደ	da	Ŗ.	dù	Ą.	dî	न	dâ	<b>L</b> o	dê	<u>e</u>	de	ዾ	dô
7	ga	7	gù	1,	gì	,2	gà	2	gê	9	ge	7	gô
M	ţa	ጡ	ţû	М,	ţì	М	ţâ	<b>M</b>	ţê	T	ţe	M	ţô
ጰ	ра	ጰ.	рû	ጰ	pî	*	pâ	ጴ	pê	尔	рe	*	рô
8	zа	8.	zû	2.	zî	2	zâ	2	<b>z</b> ê	8	<b>z</b> e	8	żô
Ð	zа	Ø.	zú	2	<b>z</b> î	9	<b>z</b> â	8	<b>z</b> ê	b	<b>z</b> e	9	żô
6.	fa	4.	fû	ፌ	fì	4.	fâ	60	fê	<b>G</b>	fe	6.	fô
T	pa	F	рû	T	pî	丁	pâ	T	pê	T	pe	7	рô

DIPHTHONGS.

Jo	kua	ኩ. ki	ւ <b>՝ հ</b>	kue	þ,	kuà	<b>'n</b> .	kuê
Po	gua	74 gu	ıì 🏊	gue	3	guâ	2	guê
ቈ	qua	<b>4.</b> qu	ıî <b>4</b> 5	que	ቋ	quâ	ቋ	quê
'lo	hua	7. hu	ıì <b>7</b> 4	hue	2	huâ	<i>ን</i> ኔ	huê

PUNCTUATION.

: Stop for the division of words : Comma : Semicolon : Full stop

NUMBERS.

#### 

Ethiopic, formerly the vernacular language of the Abyssinians, by whom it was called Geez, is only preserved in writings. As a Semitic language it bears a close affinity to the Himyaric, a South-Arabian dialect, which was superseded in the times of Mahomed. The Ethiopic possesses a high degree of flexibility which is mainly due to the diligence with which the study of Greek writings was cultivated in Abyssinia. The Alphabet originally consisted of consonants without indications of vowels. In form it approaches the Himyaric and thus differs from the other Semitic characters. Ancient Ethiopic inscriptions show examples of writing from right to left; owing, however, to the early influence of Greek literature, especially after the introduction of Christianity, the arrangement of words was fixed from left to right. At the same time the coalition of consonants and vowels was indicated by particular forms, which gave rise to the adoption of a complete syllabarium. With the change of the ruling power in the fourteenth century the Ethiopic language began to decay, and rapidly falling into disuse, it is now replaced by the Amharic language.

### AMHARIC.

This language deriving its name from the kingdom of Amhara in Abyssinia, has supplanted the ancient Ethiopic idiom. The kings of Shoa, on gaining the upper hand, effected the preponderance of the Amharic language, to the exclusion of the kindred Ethiopic. The Alphabets of both languages are identical, except the following Characters, which are peculiar to the Amharic language.

with a	with û	with î	with â	with ê	with e	with ô
ช sha	<b>Դ</b> shմ	7 shî	ፕ shâ	ሼ shê	ሽ she	ጽ shô
F tsha	賽 tshû	🐮 tshî	ச tshâ	🐮 tshê	🕇 tshe	🗱 tshô
<b>ኝ</b> ña	芳 ñù	T ñî	<b>な</b> ñâ	Z ñê	🤏 ñe	🏞 ňô
ሽ kha	Ћ khủ	<b>ዀ</b> khî	ኽ khâ	<b>ħ</b> khê	n khe	ኽ khô
<b>T</b> ja(Fr.)	<b>ℋ</b> jû	<b>TC</b> jî	<b>ℋ</b> jâ	<b>T</b> jê	<b>y</b> je	γ jô
<b>g</b> ja	<b>द्र.</b> jú	<b>筅</b> jî	<b>A</b> jâ	<b>g</b> jê	<b>g</b> je	🏿 jô
chha	<b>ՇԵ</b> chhù	<b>ձ</b> ehhì	தை chhâ	Ger chho	chhe	<b>6™</b> chhỏ
		]	DIPHTHONGS			
2	lua	<b>K</b> šua	a ·	<b>አ</b> nua	a	<b>)</b> tua
A H	mua	<b>g</b> bu	a ·	<b>¾</b> zua	G	<b>)</b> çua
Z	rua	‡ tua	ì	🏅 🐪 yua	3	zua
2	sua	天 cu	3	ዷ dua	š	fua

### TURKISH.

The Turkish language is a compound of words taken from the Tatar, Persian and Arabic languages. The high dialect, only spoken at Constantinople by people of quality, and serving as the written language, is a compound of Persian and Arabic words. Like most oriental languages, Turkish is written and read from right to left.

- \*\*Elif supplies the german vowels a, y, o, u, the consonants of the word being hard; but the german e, i, ö, ü, the consonants being soft. When Alif is followed by a hard consonant, the \_\_\_\_ (Ustun) is pronounced like a, the \_\_\_\_ (Esre) like y, and the \_\_\_\_ (Utru) like o or u. Following, however, a soft consonant, the \_\_\_ (Ustun) is to be read as e, the \_\_\_\_ (Esre) as i, and the \_\_\_\_ (Utru) as o or u. In the middle and at the end of words, without Hamzalif, the Alif is always pronounced like a, but with Hamzalif, like ê.
- Ba is our b. After Ta, Tha, Jim, Cha, Sin, Shin, Ssad, Tta, Qaf, Gef it is often read like p.
- Pa is our p.
- Ta is our t. In the conjugation of some verbs it is changed into Dal.
- ثلث Tha is our s or ss, except the word ثلث tult. The Arabs pronounce it like th.
- Jim, the italian g before e or i. When meeting the consonants named above in connection with the letter, it is pronounced like Tchim.
- Tchin like our ch in chess.
- Hha like h in have.
- Cha, the german ch in brauchen.
- Dal like d. It is pronounced like t when meeting the consonants named above in connection with the letter .
- S Dhal like z.
- Ra like r.
- $\int Za$  like our z.
- Sin like s, ss.
- ش Shin like sh.

- Ssad like sharp ss.
- ف Ddad, like our z; the Arabs pronounce it like d.
- Let Tta like t or th; it is often confounded with Ta and Dal.
- Li Zza like our z.
- $\mathcal{E}_{y,u}^{Ain \text{ like a strong guttural and nasal } a}$
- خ Ghain like g guttural.
- فFa like our f.
- Qaf like k, kh or ck.
- Kaf, like q or k, as in the french words qui, quel.
- Gef, accords with our g in give; in some cases it is pronounced like gi very soft; in the middle of words and in some terminations like y.
- Saghur Nun, i. e. mute Nun, like the french nasal-n in mon, son.
- J Lam our l; in some cases it is soft like l in limb, in some hard like l in all.
- Mim, like m.
- Nun our n; but when followed by a Ba, it is pronounced like m.
  - y Waw our w or v; furnished with Utru, it is pronounced like u in conjunction with hard consonants; like german ü or ö, how ever, in conjunction with soft ones.
- $\mathfrak{p}$  Ha like our h; at the end of words it is mostly pronounced like a or e.
- M Lamelif, la or lia (Ligature).
- Ya, when a consonant like our y, when a vowel like i; it represents a vowel only in the middle or at the end of words.

#### ORTHOGRAPHICAL SIGNS.

- Ustun is placed over the consonants and pronounced like a with a hard consonant, like e with a soft one.
- Esre below the consonants, is pronounced like vowel y with a hard consonant, but like i with a soft one.
- Utru is pronounced like o or u with a hard consonant, but like o or u with a soft one.
- = Iki ustun (double Ustun) like en.
- " Iki esre (double Esre) like in.
- S Iki utru (double Utru) like on or un.

  The three last marks are only employed in Arabic words.

- Jesm (sign of pause) is placed over a consonant wanting a vowel, followed by an other consonant.
- Teshdid or Shedde when placed over a consonant doubles it.
- Meddelif or Medda, is only placed over the Alif, which, then, is always pronounced like a.
- pronounced like  $\hat{e}$ ; over Waw, like u, over Ya, like i; at the end of words, ending with a vowel, like i.

### **PERSIAN**

Elif Ba Pa	uncon- nected	connected with a preceding letter	connected with both	connected with a following letter	Pronun- ciation	Numer: value	Notes
Ba Pa		L.	'				
Pa		,			Spiritus lenis	1	Many Arabic words
		ب	٠	ڊ	b	$2 \parallel$	introduced into the Per the Persian alphabet
m	پ	پ	⋄	' پ	p		consonants, which ar
Ta	ఆ	ب ا	۲	ڌ	t soft	400	read from right to l consonants, 28 are co
Tha	ث	ث	<b>*</b>	ڎ	S sharp	500	languages; only the are purely Persian;
Jim	ج	4	خر	<b>?</b>	j	$3 \parallel$	
Tchim		<u>چ</u>	Ş	÷	tch		ڙ چ پ
Hha	7	<i>\$</i>	<b>S</b> \	2	hh sharp	8	VOWEI
Cha	てさ	やややさる	泛	خ	kh!guttur.	600	All Persian letters a
Dal	S	۵	. ;		d	4	except Elif, Waw and supply long vowels (th
Dhal	ن	ふ		• •	Z soft	700	times, represents a sh
Ra	)	7			r	200	la , w
Za		ア			Z soft	7	The short vowels are
Zha	ز ژ	γ̈́			Zhor <b>j</b> french		∠Zabar, a Zir,
Sin	س	J w		w	S sharp	60	ORTHOGRAPHIC
Shin	ش	<u>ش</u>	ش	ش	sh	300	Hamza, at the
Ssad	ص	ص	ھ	ص	S sharp	90	sometimes supplies the
Ddad	ض	ض	ض	ض	Z hard	800	also placed above at middle of a word,
Tta	ط	ط	ط	ط	t	9	represents a consonar
Zza	ظ	ظ	ظ	ظ	Z hard	900	w Teshdid, dou
Ain	ع			2	Spiritus lenis	70	~ Medda. Inste
Ghain	ق ف ع	ق ف	Ż	غ	gh guttur.	1000	written twice, a Me over it. It is properly
Fa	ف	ف	ė	ف ا	f	80	but written lengthwise has a vertical form.
Qaf	ق ا	ق ا	ä	ڌ	k guttur.	100	• Jezma, over a
Kaf	<u>ك</u>	실	ک ک	5	k	20	which a syllable ends. over Waw or Ya, w
Gaf	ك ڭ	ی ا	کڪ	ذُ ڪُ	g palatal		diphthong with a pre
Lam	J	لل	1	J	1	30	CADATA
Mim	ما	•	+	م	m	40	CIPHEI  To write numbers
Nun	ن	٠.	ند	ذ	n	50	employ either the al
Waw	,	,			w	6	Arabic ciphers (see u
Ha	8	X	8	ø	h	5	LIGATUI
Ya	ی	ی		ڍ	y and i	10	、ソメ Lam-I

words having been he Persian language, abet consists of 32 ch are written and to left; of these re common to both the following four

#### WELS.

tters are consonants, w and Ya, which also els (the Waw, somes a short vowel):

#### W y ک

s are written thus:

Zir, e <u>,</u> Pish, u

#### PHICAL SIGNS.

- at the end of a word, lies the Elif; it is ove an Elif in the ord, when the Elif nsonant.
- doubles the letter placed.
- Instead of an Elif a Medda is placed operly a second Elif, thwise; sometimes it orm.
- over a consonant by ends. It is also placed a, when they form a a preceding.

#### HERS.

mbers, the Persians he alphabet, or the see under).

ATURE.

ım-Elif, la.

### AFGHAN OR PUSHTOO

	Figure		Pronun-	Figure			Pronun-	
unconnected	in the midst	at the com- mencement	ciation	unconnected	in the midst	at the com- mencement	ciation	
•	16	•	a, á, i, u	ش	, iii	ش	$\operatorname{sh}$	
ب	٠	ڊ	b	ښ	ىبە ښ	<b>.</b>	khín	
پ	<b>\$</b>	ۑ	p	ص	ھ	ص	ss	
···	ێ	ڌ	t	ض	فد	ض	$\mathrm{d}\mathbf{z}$	
<b></b>	<del></del>	ڌ	ţţ	ط	4	ط	t	
ؿ	2	ڎ	t's	ظ	ظ	ظ	Z	
<del>*</del>	尝	ڎ	t's	ع	2	ء	æ, â	
<b>さ</b> て	Z!	ج	j	غ	ż	. غ	gh	
€	Ş	چ	ch	ف	غ	خ	f .	
~ ~	<b>S</b> \	>	h	ق	Ä	ڌ	k, q	
て さ ა	这	خ	kh	ق ک	ک ک	<b>S</b>	k	
S	J	٥	d	المح ف	ک ک	\$	g	
\$	\$	٥	ġġ	J	7	3	1	
ن	ن	ن	Z	م	•	م	m	
)	7	)	$\mathbf{r}$	ن	ند	ذ	n	
2	,	,	ŗŗ	ن .	ن ن	ڼ	iżu	
;	7	";	Z	,	<b>y</b>	,	wúo	
÷	څ	څ	dz	8 X	8	ø	h	
ژ ر		ۋ ر	jz	£	5	دً	a	
	ا ب	اُس ا	S	چ	*	ڍ	y, e, í, ai	

#### NOTES.

Before the introduction of arabic words, the original Pushtoo alphabet consisted only of 29 different sounds; at present, the Afghans make use also of the 28 arabic letters, and of these four letters used in Persian: and of these from which results an alphabet of 40 different characters which are all consonants.

The Pushtoo vowels are the same as the Arabic and Persian:

Zabar or Fatha a, Zer or Kasrah e, Pesh or Zammah u.

They are placed either above or under the consonant beginning a syllable, as: ba, bi, bi, bi, bi. bi. bi. bi is read as the

diphthong au; followed by 5, as the diphthong ai.

- or or Jesm or Jesmah indicates that the consonant has no vowel and the syllable is finished.
- Meddah or Medd, an other form of Elif, is sign of producing a syllable.
- w Teshdid indicates that a consonant is to be pronounced double.
- \_ Weslu, joining-mark.
- Hamzah supplies the place of Elif.
- the end of the words, pronounced by adding a n to the vowels: an, in, yn.

# COPTIC

Figure		Name	Pronunciation
$\mathfrak{A}$	2	Alpha	ă
B	В	Vida	b v
$\Gamma$	y	Gamma	g
$\mathbf{\lambda}$	Ŋ	Dalda	d
G	$\epsilon$	Ei	ĕ
ζ	ζ	Zida	z
H	н	Hida	ĭ
$\boldsymbol{\Theta}$	θ	Thida	th
I.	1	Jauda	ĭ
K	K	Kabba	k
Y	У	Laula	1
U	u	Mi	m
И	u	Ni	n
ξ	ξ	Exi	X
0	0	0	O short
П	П	Pi	p b
<b>P</b>	P	Ro	$\mathbf{r}$
C	C.	Sima	s ·
T	7	Dau	t d
Y	r	He ·	i, Ü Germ.
Φ	ф	Phi	ph
	$\boldsymbol{\chi}$	Chi	ch sc
$\Psi$	Ψ	Ebsi	ps
	w	0	O long
P	d	Fei	f ph
8	$\tilde{\mathbf{s}}$	Hori	h
Þ	か	Chei	· kh
W	മ്പ	Scei	sh
X	20 20 20 X	Giangia	g dsh
0	5	Scima	sk sc gh
T	十	Dei Ligatur	e ti
· E,	$\boldsymbol{\beta}$	So	Cipher 6

The Coptic language is divided into two dialects: the upper-egyptian or thebaic or sahidic, and the lower-egyptian or memphitic or coptic par excellence, to which may be added a third. the bashmuric dialect. The letters & — W in the Coptic alphabet are of greek origin; — on the other hand signify sounds which either wanted at all in the greek language, or which since the christian era no longer used in writing; they are taken from the older egyptian. This sign — denotes the syllable ti; its prototype is the semitic and greek Tau.

Notes

The vowels are:

### & E 1 0,

the oo is written by  $\mathbf{OY}$ , like in greek; before a consonant it is pronounced by oo, before a vowel by  $\mathbf{v}$ . The coptic diphthongs are:

### 71 61 01

pronounced in the sahidic dialect only as ĕ, ĭ, ĭ, in the memphitic, however, as the german diphthongs ai, ei, oi.

### READING-SIGNS AND PUNCTUATION.

- ' above a letter: the greek gravis.
- ' behind a word in sahidic manuscripts: dividing sign.
- •J• signifies a greater pause, like our semicolon or point.
- signifies a shorter pause, like our comma.
- sign of division.
- \_\_ sign of abbreviature above the characters.
- graphic sign above some characters in sahidic manuscripts.
- diacritic sign behind some words in sahidic manuscripts.
- , Comma, only in later sahidic manuscripts.
- orthographic sign above some characters in memphitic books.

#### NUMERICAL VALUE.

The numerical value of the coptic characters is the same as in greek. Numerals are written by — above the letters; the thousands are marked by, below near the letter. (90) supplies the place of the greek (koppa).

# CHINESE.

A calculation, based upon the Imperial Chinese Dictionary, shows that the Chinese language is represented by 43,496 characters or symbols. Of this number 13,000 are totally irrelevant and consist of signs which are obsolete, incorrectly formed, and unexplained. For the expressions in ordinary literature about 4000 signs appear to suffice. The writings of Con-foo-tse (Confucius) and his disciples can even be read by the help of only 2500 characters, and a knowledge of these will enable the student tolerably to understand all Chinese works on history and philosophy. In lieu of the phonetic and lexicographical system, which appertains to most languages, the Chinese have adopted 214 signs any of which, being placed by the side of an unknown character, indicates at once its pronunciation. These indicators of sound, are termed by the Chinese "Tribunats". European grammarians have called them "Keys" or "Radicals". Occasionally the "Tones" (modulating accents) are appended at the top or foot of the character, at the right or the left side. Such accents are described as follows,

1 o even tone. 2 o entering tone. 3 o falling tone. 4 o rising tone.

The "Keys" are divided into 17 Classes, according to the number of strokes of which each character is composed, and are arranged in the following order:

Clas	SS							Class	3						
1.	consisting	of 1	stroke	extends	from	Nr	. 16	10.0	consistir		stroke	es extends	fron	ı Nr	.187194
2.	))	» 2	strokes	))	))	))	7-29	11.	))	» 11	))	»	))	>>	195 - 200
3.	n	» 3	>>	))	))	>>	30 - 60	12.	1)	» 12	>>	))	>>	))	201-204
4.	»	» 4	<b>))</b>	>>	1)	>>	6194	13.	))	» 13	))	1)	>>	))	205 - 208
5.	>>	» 5	<b>»</b>	>>	))	))	95117	14.	))	» 14	))	19	))	>>	209-210
6.	**	» 6	">	))	>>	))	118—146	15.	))	» 15	))	n	))	>>	211
7.	))	» 7	))	))	))	))	147-166	16.	>>	» 16	))	))	))	))	212 - 213
8.	1)	» 8	>>	>>	1)	))	167-175	17.	))	» 17	))	))	))	))	214
9.	))	» 9	<b>»</b>	>>	>>	1)	176 - 186			·					

9. " " 9 " "	» » 176–175 » » 176–186	11. " "11	" "	" " 214
1 — o yĩ, one	17 <sub>°</sub> $\bigsqcup$ $k$	răn 🌯	33 ±°	s'z, scholar
2 chiếh, perpendicular stroke	18 <sub>。</sub> 刀 t	ou, knife	34 <b>久</b> °	fanfun
3 \ \ \ \ \ \ \ \ tien, point	19 <b>九</b> la	iĕ, strength	35 <b>欠</b> °	tsieh, slowly
4 <b>J</b> o pičh, stroke slanting to the left	•	hwen, equal, triangle		dsiëh, evening
5 <b>L</b> , yi, crooked stroke	21° F	i, spoon	37。大	
6	22 L f	ang, to pull out	38 女°	
7° urh, two	$_{23}$ $\square$ $_{\circ}$ $_{k}$	wah, division between fields	39 子。	tsĕ, son, child
8 o yitièn-yiwa	24 <b>+</b> s			mou or poĕn-an
9 $\bigwedge_{\bullet}$ jin, man	25° p	ooh, to divine		tsun, inch
10 L. chàh, foot	26 <b>11°</b> ts	sshi	42	siou, small
11 <b>人</b> 。 shàh, to enter	27 <b>F</b> o s	hi, shelter	43 九。	kang, horrible
12 人。pah, eight	28 <b>4</b> ° c	hee, perverse	44 P°	shi, corpse
13 $\prod_{\circ} kwah$ , desert	29 <b>Z</b> ° y	iu, again,	45 H°	tsou
14 o mièn, to cover	30° 📙 k		46 Щ°	san, mountain
15° <b>y</b> <i>pin</i> , ice	31 ° 📙 h	wei, return	47 . {{{	chuĕn, stream
16 L° chi, bench	32 . ± to	oo, the ground	48° <u>T</u>	$k \delta ng$ , artisan, time

49 <b>C</b> ° chi, self
50 th, chin, cloth
51° 7 kan, shield, spear
52 <b>y</b> uĕn, source
53 of yin, hut
54 c sou, long walk
55 Kóng, higher
56 July yieh, spear
57 <b>\(\beta\)</b> o kong, a bow
58 <b>3</b> kway, Come!
59 san, coat
60 <b>f</b> shuang-jin, two
nen men
61 sin, heart men
nen men
61 sin, heart men
men 61 心。sin, heart 62 大 kōh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand
men $61$ 心。 $sin$ , heart $62$ ° 戈 $koh$ , a lance $63$ $\digamma$ $w'\bar{v}\bar{v}$ , inner door $64$ $\digamma$ $sheu$ , hand $65$ $\eth$ $tz'$ , branch
61 心。sin, heart 62° 戈 kōh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand 65 文 tz', branch 66 戈 chi, the stalk
men 61 心。sin, heart 62° 戈 koh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand 65 文 tz', branch 66 戈 chi, the stalk 67 文 funn, gentle
men 61 心。sin, heart 62 戈 koh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand 65 支。tz', branch 66 支。chi, the stalk 67 文 funn, gentle 68 斗 tou, a measure
men 61 心。sin, heart 62 戈 kōh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand 65 支。tz', branch 66 支。chi, the stalk 67 文 funn, gentle 68 斗 tou, a measure 69 斤。chin, hatchet,
men 61 心。sin, heart 62 戈 koh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand 65 支。tz', branch 66 支。chi, the stalk 67 文 funn, gentle 68 斗 tou, a measure 69 斤。chin, hatchet, pound 70 方 fang, a square,
men 61 心。sin, heart 62 戈 koh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand 65 支。tz', branch 66 支。chi, the stalk 67 文 funn, gentle 68 斗 tou, a measure 69 斤。chin, hatchet, pound fang, a square,
men 61 心。sin, heart 62 戈 koh, a lance 63 戶 w'ōō, inner door 64 手。sheu, hand 65 支。tz', branch 66 支。chi, the stalk 67 文 funn, gentle 68 斗 tou, a measure 69 斤。chin, hatchet, pound 70 方 fang, a square, then

		91
<b>7</b> 3	日。	yuĕh, to talk
74	月。	yueh, moon
		moh, tree
		chièn, debtor
77	非。	ts', to stop
78	万	tie, wicked
<b>7</b> 9	殳。	$k \delta h$ , the young of animals
80	サ	f'0, is not
81	比。	pi, to compare
82 o	毛	mou, feather
83	氏°	sz, clan
84	气。	chi, air
85	水°	shway, water
$^{86}$ o	火	chaw, fire
87	爪°	tsou, claws, nails
88	义	f'oh, father
89 o	爻	yow, sign-
90	爿。	chwang, pole
$^{91}$ o	片	<i>pièn</i> , splinter
92 o	牙	yah, teeth
93 o	4	niu, ox
		chuến, dog
95 o	玄	yuĕn, intermin- able
96	玉。	$ni\delta h$ , gem

97。瓜 kwah, melon 98。瓦 wàh, tiles, earthenware kan, sweet 100 生° senn, to live, to give birth  $_{101}$ 。用  $_{y ing, to use}$ Ho tièn, field 103 **疋。** piĕh, piece 104 **T** o tsičh, sick アた。 fàh, to divide **怕**。 buh, white <sub>107</sub>。皮 bi, skin 108 min, implement 109 **目。**mòh, eye <sub>111</sub> 夫° <sub>shi, arrow</sub> 石。shiĕh, stone 元° sz, to admonish nahy or shoh, clapper of a bell haw, grain 穴。 yueh, cave **T**. lie, to stand 11°-choh, bamboo 119。米 mi, rice 糸° s'z, silk

121 <b>缶</b> f'ow, jar	145 🏂 i, clothing	169°   II mun, a door
122 kang, hedge	146 j yiu, twilight	170。阜 fou, a mound
123 ¥ yang, sheep	147 見° chièn, to see	171 of di, to accomplish
124 $\ddot{i}$ , long feathers	148° krìh, horn, cor-	172° É chiah, fine
125 <b>老。</b> <i>laò</i> , old	149 nièn, word	173 , yü, rain
126 $m$ $urh$ , and	150 Aòh, apertures in rocks	174 🛱 sin, green
127 未。lie, handle of a spade	151 cou, head	175° # feeh, not
128 ull, the ear	shü, swine	176 mièn, face
129 <b>‡</b> yučh, to manifest, a baton	chi, superior order of animals	177 $\stackrel{\rightleftharpoons}{=}$ o $k \stackrel{\sim}{e} h$ , leather
130 $j \delta h$ , flesh	154 💂 , pèi, valuables	非 hway, high
131 E, chin, an official	155 赤。chěh, red	179 £ chiu, leeks
132 <b>a</b> ° ts'z, from one self	156 走。 tsou, to walk	180 • Fin,a sound, tone
133 <b>至</b> ° <i>tsz</i> , to arrive, extreme		181 <b>A</b> hièh, a sheet, a leaf
134 🛱 ° chiu, mortar	158 shin, body	182 J fong, wind
135 <b>£</b> o chweh, tongue	159 o chü, cart	183° fee, to fly
136 <b>/t</b> chiah, strong	sin, bitter, hard-ships	184 <b>&amp;°</b> shëh, to eat
137。什 chiu, vessel	161 , jën, an hour,	185。首 sheu, head
138 $\not \models$ o $kun$ , inferior order of nature		shiang, scent
139 🖰 ° sĕh, colour	163 <b>E</b> • je, a town	187 mâa, horse
140 艸艸° tsaò, grass	164 <b>西°</b> yoo, twilight	188 kwùh, bones
141。 <b>走</b> 'hoo, tiger	165 K tsie, to separate	189 ° 📥 kaò , high
142 <b>g°</b> chồng, insects	166 <b>E</b> li, one third of a mile	haard
143 m° shwëh, blood	167 £ • chin, gold, metal	191 tou, to fight
144 To jen, to walk, to act	chang, long	chang, sweet wine

1									
	193	鬲。	lièh, to cup open	201	黄	hwang, yellow	208	鼠。	chü, rat
	194	鬼	kway, devil	202	黍	shü, millet	209	鼻	pièh, nose
	195 o	魚	nü, fish	-		'hĕh, black	210	亦。	tsi, to put in or- der, equal
	196	鳥	niαò, bird	204	黹。	chi, embroidery	211	齒。	ts'z, the back teeth
	197	鹵	loo, brine	205 o	黽	min, a toad	<sup>212</sup> c	龍	$long,\mathrm{dragon}$
	198	鹿。	$l\delta h$ , stag	206	鼎	tin, tripod	213	龜。	kway, tortoise
	199	麥。	mèh, wheat	207 0	鼓	koo, drum	214	龠。	yàh, a musical instrument
	200 o	麻	$m\hat{a}$ , hemp						

### ARITHMETICAL FIGURES.

All arithmetical combinations are performed by 17 Cardinal figures. In the subjoined table, three different forms of numerical characters are given. The series in the left column represents the plain hand which serves for literary and ordinary purposes. In the middle column words are employed instead of figures. This class is used in bonds, contracts etc., where it is of importance to guard against alterations and fraud. The figures in the right column, written in a "running hand", are used by merchants and traders in keeping their business accounts.

-	壹。	I	yĕ,	1	+	拾-	<del> -</del>	shiàh,	10
	貳。	1)	urh,	2	百	•		pĕh,	100
	类。	11]	san,	3	千	=	F	tsièn ,	1000
四	肆。		s'z,		萬	フ	5	van,	10,000
$\mathbf{H}$			00,		億	1	<b>≥</b>	ee,	100,000
六	陸。		loh,	6	兆				1,000,000
上	柒。				京		玄	chin,	10,000,000
八	1W1		$p\grave{a}h$ ,		垓	t	玄。	nyàh, •1	00,000,000
九	戏°	文	chew,	9	71				

The numbers by which 10, 100 etc. are multiplied are placed at the top of the multiplicand. The numbers added to ten etc., are marked below the figure.

Example + ten.  $\frac{}{}$  twice ten and two, or 22.

# **JAPANESE**

### IN THE KATA-KANA CHARACTER.

(This type was cut under the direction of Prof. J. Hoffman of Leyden and cast by N. Tetterode in Rotterdam.)

I - ro - fa	(Abc).	THE JAPANESE ALPHABET organically arranged.*
I-RO-FA  25 井 yi 26 ノ no 27 オ o 28 ク ku 29 ヤ ya 30 マ ma 31 ケ ke 32 ン fu 33 コ ko 34 エ ye 35 テ te 36 ア a	(Abc).  1 イ I 2 口 ro 3 ハ fa, va 4 二 ni 5 ま fo 6 へ fe, ve 7 ト to 8 チ tsi 9 リ ri 10 又 nu 11 ル ru 12 ヲ wo	II and the second secon
37 サ sa 38 キ ki 39 ユ yu 40 メ me 41 ミ mi 42 シ si 43 ヱ e 44 ヒ fi, vi 45 モ mo 46 ヒ se 47 ス。su	13 ア wa 14 カ ka 15 ヨ yo 16 ダ da 17 レ re 18 ソ so 19 ツ tsu 20 子 ne 21 ナ na 22 ラ ra 23 ム mu 24 ウ u	16 万 ge 40 片 do 64 子 ne 65 二 ni 66 人 no 18 ギ gi 42 グ dsu 67 又 nu 68 之 n 69 万 ra 20 万 gu 46 モ mo 71 り ri 72 サ gu 46 モ mo 71 り ri 72 サ gu 47 人 mu 72 口 ro 24 ザ za 48 ハ fa 73 ル ru  * The accent nigori, consisting of two minute marks at the right of the syllable, softens the consonant. The accent maru, a dot likewise at the right, hardens the consonant. By the addition of these marks and the n, unattended by a vowel, the letters originally 47, are raised to the number of 73.

### ABBREVIATIONS AND ORTHOGRAPHICAL SIGNS.

- 7 koto. T goto. Y site. 王 tama.
- > Sign of doubling a letter, placed in the middle line.
- Sign of doubling a syllable.
- Sign of lengthening a vowel.
- <sup>c</sup> Full stop. comma, towards the right, beyond the middle line.

### SANSCRIT

#### CONSONANTS.

Each consonant is sounded with an inherent

	sl	ort a.				
GUT	TURALS.	LA	BIALS.			
क	ka	प	pa			
ख	kha	দ	pha			
ग	ga	ब	ba			
घ	gha	भ	bha ====			
<u>ड</u>	'nа	म	ma			
PAI	LATALS.	SEMI-	VOWELS.			
च	cha	य	ya			
क्	ch'ha	1 2	ra			
त	ja	ল	la			
क	j'ha	व	va			
ञ	ña					
CER	EBRALS.	SIBIL	ANTS AND			
7	ţa		IRATES.			
ठ	ṭha	श	sha			
<u>उ</u>	фа	ष	sh'ha			
6	фhа	स	sa			
पा	ņa	न्ह	ha			
DH	ENTALS.	æ	¥			
ਜ	ta	This cha	racter peculiar			
य	tha	to the R	tig-Veda has a which partakes			
द	da	of l and	r. It stands for bral da. When			
ध	dha	it repres	sents the aspi-			
ন	na		rate of this letter, it is expressed by (tha).			

ADDITIONAL SIGNS. Virâma (pause) is placed under a final consonant, and denotes the absence of the inherent short a.

indicates the close of a sentence, ending in a vowel, a diphthong or a visarga. In poetry it denotes the half of a verse. At the end of a verse or a period this mark is doubled ||.

Serves 1. as the sign of hiatus, 2. as sign of the elision of α after e and o, 3. as the sign of coalescence of two α.
o is the sign of abbreviation.
c and A represent the letter r. The former sign is presented before the consequent (and the

is pronounced before the consonant (and the semivowel ri) at the top of which it is placed; the latter sign is placed under the consonant and sounded after it.

#### VOWELS.

The vowels in the left row are uttered as initials or are placed before their consonants. The vowel-signs in the right division being medials and finals, coalesce with their consonants, and are respec-tively wavelengers, and are respec-

tively p	the	nder, before and after letters.
刄	a	COALESCENT VOWELS.
ग्रा	â	I â follows the consonant
इ	i	fiprecedes " "
w w o	î	1 follows "
उं	u	ounder » »
ऊ	û	c û » »
$\mathbf{R}$	ŗ	
豤	Ŷ	c i » »
लृ	1	& <b>f</b> » » »
ૡૃ	ĵ	w j " " "
	THONGS.	~ ! » » »
	e e	∼e over » »
र रे	ai	ai » » »
म्रा	0	7 0 follows "
ग्री	au	jau » » »

#### NASAL SOUNDS.

Anusvàra and ⊌ Anunàsika, are substitutes for m and n. The anunasika has its place above the letter or laterally with virama

: ḥ (orproperly &) visarga, + jihvàmùlîya and X upadhmâniya,

are strong final aspirates. The visarga which is the substitute for s and r is the only one in common use. The last two signs bear also the common designation of ardhavisarga.

### PROSODIAL MARKS.

denotes brevity, 5 length.

#### ACCENTS.

Anudâtta or grave accent stands under the vowel. + Svarita or circumflex is put over the vowel.

In connexion with these marks the numerals and 3 serve as accents.

### NUMERALS.

5 6

# SANSCRIT

The similarity of shape occasions mistakes in correcting proofs; it may therefore be of advantage both to compositors and readers of proofs to make use of the annexed numbers of reference. The form of the subjoined Alphabet differs from that which precedes, but is superior in point of correctness.

				<del>,</del>						
1 अ	a	27	75	re(withAcc.)	53	क्य	kya	79	ङ्ग	ńka
<sup>2</sup> <b>刻</b>	â	28	<b>a</b>	ai (with Acc.)	54	क्र	kra	80	ङ्ग	ńkta
³ <b>₹</b>	i	29	<i>≫</i>	raim	55	末	kra	81	ङ्ग	ńkya
4 ई	î	30	•		56	क्र	kla	82	ङ्ख	ńksha
5 <b>,                                   </b>	u	31	•		57	ক্ৰ	kva	83	ङ्ख	ńkha
6 <b>あ</b>	û	32	•	-	58	क्ष	ksha(x)	84	ह्य	ńkhya
7 <b>ऋ</b>	ŗi	33	1	Ac	59	ह	ksh	85	ङ्ग	ńga
8 <b>ऋ</b>	<b>ŗ</b> i	34	11	Accents	60	स्म	kshma	86	झ्य	ńgya
9 स्ट	ļi	35	0		61	स्य	kshya	87	ङ्घ	ńgha
10 ल्ह	ļi	36	-	nd c	62	स्व	kshva	88	झ्य	ńghya
11 <b>ए</b>	e	37	5	and other orthographical	63	ख	kha	89	ङ्ग	ńghra
12 <b>T</b>	â	38	2	or or	64	Į¢.	kh	90	ङ्	ńńa
13 <b>f</b>	i	39	ν.	thog	65	ख्य	khya	91	च	cha (ća)
14	î	40	^	rapl	66	ग	ga	92	Ŧ	<b>ch</b> ( <b>c</b> )
15 <b>T</b>	rî	41	_	nical	67	1	g	93	च	ćća
16 🥦	u	42	1	signs.	68	म	gna	94	च्छ	ććha
. 17 🖎	û	43	c	ns.	69	ग्यू	gnya	95	ब्र	ćña
ع 18	ŗi	44	10		70	य	gra	96	च्म	ćma
19 <b>£</b>	<b>ŗ</b> i	45	-		71	ग्य	grya	97	च्य	ćya
20 B	ļi	46	क	ka	72	घ	gha	98	छ	ćha
21 დ	ļi	47	क्	kka -	73	3	gh	99	छ्	ćhra
22 🥆	e	48	क्त	kta ·	74	ਸ਼ -	ghna	100	-	ja
23 🗢	ai	49	त्त्य	ktya	75	घ्म	ghma	101	5	j
24	0	50	त्त	ktva	76	घ्य	ghya	102	ज	jja
25 💙	e(with Acc.)	51	क्र	kna	77	ঘ	ghra	103		jña
26 🛰	re	52	क्म	kma	78	,	ńa	104	•	jñ
	. 1			. "			l)			•

# SANSCRIT

	1	li I		ii		1	
105 <b>37</b>	jjha	133 स्ड	ņḍra	161 <b>E</b>	th	189 ध्य	dhya
106 ज्य	jya	134 सङ्ग	ņḍrya	162 ध्य	thya	190 घ्र	dhra
107 ज	jra	135 एढ	ṇḍha	<sup>163</sup> ट्	da	191 ध्व	dhva
108 ज्व	jva	136 स्	ņņa	164 दु	du	192 ਜ	na
109 <b>T</b>	jha	137 <b>एय</b>	ņya	165 टू	dû	193 🖚	n
110 新	jha	138 स्व	ņva	166 ਵ	dŗi	194 न	nta
ш ज	ña	139 <b>त</b>	ta	167 द्व	dga	195 न्य	ntya
112 3-	ñ	140 7	t	168 ব্র	dgha	196 न्त्र	ntra
113 ज्व	ñća	141 त्क	tka	169 <b>ह</b>	dda	197 न्द	nda
114 ज्ञ	ñja	142 <b>有</b>	tta	170 हू	ddba	198 न्द्र	ndra
115 Z	ţa .	143 स्य	ttya	171 <b>द्य</b>	ddya	199 न्ध	ndha
116 <b>द्व</b>	ţka	144 न्त्र	ttra	172 দ্ব	ddha	200 न्ध्र	ndhra
<sup>117</sup> ट्ट	ţţa	145 天石	ttva	173 द्ध	ddhya	201 स्त	nna
118 स्त्र	ţya	146 हन	tna	174 <b>इ</b>	dna	202 न्प्र	npra
119 g	ţha	147 <b>त्प</b>	tpa	175 ব্ৰ	dba	203 त्य	npha
120 ट्य	ṭhya	148 त्म	tpra	176 富	dbra	204 死	nphra
<sup>121</sup> 夏	ṭhra	149 <b>त्प</b>	tpha	177 🕱	dbha	205 न्म	nma
122 ह	фа	150 成	tphra	178 द्वा	dbhya	206 न्य	nya
123 ड्ड	ффа	151 <b>तम</b>	tma	179 द्म	dma	207 न्स	nsa
124 ह	ḍḍa	152 त्स्य	tmya	180 द्य	dya	208 <b>प</b>	pa
125 ह	dha	153 त्य	tya	<sup>181</sup> द्र	dra	209 L	p
126 द्य	ḍhya	154 <b>च</b>	tra	182 夏	drya .	210 <b>円</b>	pta
<sup>127</sup> द्र	<b>ḍ</b> hra	155 🖘	trya	183 ਵ	dva	211 🕱	pna
128 स्	ņa	156 त्व	tva	184 द्वा	dvya	212 प	ppa
129 <b>U</b>	ņ	157 त्स	tsa	185 ម្	dha	213 <b>प</b>	pma
130 ग्र	ņţa	158 त्स्न	tsna	186 %	dh	214 घ	pya
131 एढ	ntha	159 त्स्य	tsya	187	dhna	215 <b>प्र</b>	pra
132 राइ	ņḍa	160 घ	tha	188 <b>ध्रम</b>	dhma	216	pla

			SANS	SCRIT			
217 म्ब	pva	245 य	ya	273 契	çra	<sup>301</sup> स	sma
218 प्स	psa	246 Z	<b>y</b>	274 裏	çla	<sup>302</sup> स्य	smya
219 फ	pha	247 च	$\mathbf{y}$	275 स्त्र	çva	<sup>303</sup> स्य	sya
220 ৰ	ba	248 य्य	yya	276 इश	çça	<sup>304</sup> ਸ਼	sra
221 6	b	249 <b>र</b>	ra	277 <b>घ</b>	sha	<sup>305</sup> स्व	sva
222 स्	bgha	250 <b>र</b>	ru	27S <b>E</b>	sh	306 <b>स्स</b>	ssa
223 🔄	bja	251 튡	rû	279 <b>E</b>	shṭa	307 ह	ha
224 <b>न्ह</b>	bda	<sub>252</sub> ਲ	la	280 स्य	shṭya	308 ਵ	h
225 ब्ध	bdha	253 🗧	1	281 <b>प्र</b>	shṭra	309 ह	bŗi
226 ব্ল	bba	254 स्क	lka	2S2 <b>ट्र</b> य	shṭrya	310 <b>晨</b>	hņa
227 <b>ə</b>	bbha	255 <b>ल्प</b>	lpa	283 <b>E</b> A	shṭrya	311 हू	hna
228 ब्र	bra	256 ल्म	lma	284	shṭva	312 <b>स</b>	hṃa
229 <b>भ</b>	bha	257 ल्य	lya	285 <b>B</b>	shtha	313 <b>ह्य</b>	hya
230	bh	258 裏	lla	286 <b>घ</b> ण	shņa	314 ह	hra
231 भ्य	bhya	259 ल्व	lva	287 <b>EU</b>	shpa	<sup>315</sup> 高	hla
232 <b>ਮ</b>	bhra	260 व	va	288 <b>E</b>	shpra	316 <b>ह</b>	hva
233 भ्व	bhva	261 3	v	289 ष	shma	317 <b>क</b>	¥
234 <b>日</b>	ma	262 <b>વ</b>	V	290 ख	shya	318 द्ध	<b>ł</b> ha
235 <b>T</b>	m	263 व्य	vya	291 <b>स</b>	sa	319 9	4
236 <b>표</b>	mna	264 व्र	vra	292 <b>Ę</b>	s	320 <b>२</b>	2
237 <b>FU</b>	mpa	265 ब्र	vva	293 स्क	ska	321 3	3
238 <b>F</b> Y	mpra	266 श	ça	294 स्व	skha	322 8	4
239 <b>म्ह</b>	mba	267 ञ्	ça	<sup>295</sup> स्त	sta	323 <b>4</b>	5
240 <b>1</b>	mbha	268 🕱	ç	296 <b>स्त्र</b>	stra	324 &	6
241 <b>F</b> 2	mya	269 😎	Ç	297' स्थ	stha	325 9	7
242 <b>县</b>	mra	270 翌	çća	298 स्न	sna	326 <b>t</b>	8
243 <b>其</b>	mla	271 🖘	çćya	299 स्प	spa	327 <b>Q</b>	9
244 <b>स्स</b>	msa	272 署	, çna	300 स्फ	spha	328 0	.0

### **TAMIL**

The Tamil language was earlier cultivated than the other members of the Drâvidian family. It includes two dialects the (ancient) Shen-Tamil and the (modern) Kodun-Tamil. Tamil is spoken throughout the plain of the Carnatic, below the ghauts from Pulicat to cape Comorin, to the neighbourhood of Trivandrum; also in the northern and western part of Ceylon where in ancient times Tamilians established their settlements. This language has 12 vowels and 18 consonants. It is read from left to right.

### » fill » full » self » » long THE CORRESPONDING LONG VOWELS. ì **1**-» feel ഉബ » foo ê 6] » they » sole DIPHTHONGS. ev in eye OU » foul ஓள CONSONANTS. k ங் 'n ng in long S ñ as gu in french règne ţ like t d of Sanscrit cerebrals ņ like n of Sauscrit cerebral த் ந் t. n in no p

SHORT VOWELS.

as in America

LIQUIDS.

as in on

rolled, partly like a cerebral, partly like a dental

intermediate between r and l.

ப் y as in yes

i r » » round

ல் l » » lap

ப் V

hard, it is of cerebral character

m

ŗ

ń

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The consonants have been divided into rough, soft and intermediate sounds. The first class includes the tenues  $(\dot{\mathbf{z}}, \dot{\mathbf{z}}, \dot{\mathbf{L}}, \dot{\mathbf{z}})$ . The second class contains the corresponding Nasals. The third class contains the Liquids. A dot placed at the top of a consonant indicates the absence of a vowel, but is omitted in native MSS.

The following rules are to be noticed in the pronunciation.

- a) Short a, before the soft letters  $\dot{\vec{m}}$ ,  $\dot{\vec{m}}$ , the intermediate letters  $\dot{\vec{n}}$ ,  $\dot{\vec{n}}$ ,  $\dot{\vec{m}}$ ,  $\dot{\vec{\mu}}$ , and at the end of polysyllabic words, sounds like e in men.
- b) Combined with a preceding  $\dot{\pi}$  it receives the same sound.
- c) The vowels e and  $\hat{e}$  as initials are pronounced as if y were placed before them.
- d) The vowels  $i(\hat{i})$  and  $e(\hat{e})$  before linguals  $(\dot{\mathcal{L}}, \dot{\varpi})$  and  $\dot{\varpi}, \dot{\mathcal{D}}$  and  $\dot{\mathcal{L}}$ ) are respectively articulated somewhat deeper than the French u and eu.
- e) The consonants  $\dot{\boldsymbol{x}}$ ,  $\dot{\boldsymbol{\beta}}$ ,  $\dot{\boldsymbol{L}}$  are only hardened as initial letters, or when doubled in the middle of a word. The same is the case with  $\dot{\boldsymbol{L}}$  which does not occur as an initial in pure Tamil words.
- f) When  $\dot{\mathbf{z}}$ ,  $\dot{\mathbf{z}}$ ,  $\dot{\mathbf{z}}$ ,  $\dot{\mathbf{z}}$  occur as medials of a word,  $\dot{\mathbf{z}}$  sounds like ch,  $\dot{\mathbf{z}}$  like b,  $\dot{\mathbf{z}}$  like th, and  $\dot{\mathbf{z}}$  like the Sanscrit cerebral d.
- g)  $\dot{\mathcal{F}}$  is always sharply hissed like ss. When the nasal  $\dot{\mathfrak{G}}$  precedes, it coalesces with it and sounds like ng (in angel). When doubled after  $\dot{\mathcal{L}}$ , or  $\dot{\mathcal{D}}$ , it sounds like ch (in church).
- h) e and y at the end of a syllable have an intermediate sound of i (in vine) and ai (in vain).
- i) Double  $\dot{\mathcal{D}}$  sounds like tt. After the corresponding nasal  $\dot{\boldsymbol{\varpi}}$ , it may be pronounced like d.

The Tamil Alphabet being syllabic, a word is divisible in any part, so long as the consonant remains united with its vowel. In punctuation the full stop alone is employed.

The vowels, in their separate forms, are only used as initials. The following table shows their mode of coalition whith the consonants. The short a, as in Sanscrit, is not expressed before a consonant.

_												
	a	â	i	î	u	û	e	ê	ey	o	ô	au
	A)	Ŋ	2	ाः ।	உ	<u>ഉണ</u>	எ	ଗ	æ:	9	<b></b>	ஒள
k	க	கா	<b>F</b>	<b>&amp;</b>	சு	∂5n_	கெ	கே	கை	கொ	கோ	கௌ
'n	<i>1</i> 5J											
s	Æ	சா	சி	$\mathscr{F}$	<b>F</b>	<b>Æ</b>	செ	சே	சை	சொ	சோ	சௌ
ñ	ஞ	ஞா	<b></b>	65	னு	ஞா	ெஞ	ஞ	ஞை	ெஞா	ஞோ	ஞௌ
ţ	<u>_</u>	டா	19_	10	<b>6</b>	$\mathcal{G}$	டெ	டே	டை	டொ	டோ	டௌ
ņ	ண	<u></u>	ணி	ணி	<u>ண</u> ;	ணு	ெண	ணே	<b>ഉ</b> ഞ്ഞ	ത്തെ	ලා	ணௌ
t	த	தா	B	$\mathcal{F}$	து	தூ	தெ	தே	தை	தொ	தோ	தௌ
ń	ந	நா	Þ	௺	நு	<i>ந</i> ூ	நெ	சூ	நை	தொ	நோ	நௌ
p	ĻI	பா	பி	பீ	Ч	$\mathcal{H}$	பெ	பே	பை	பொ	போ	பௌ
m	$\mathbf{m}$	மா	மி	மீ	மு	$\boldsymbol{\psi}$	மெ	$\mathbb{G}\mathbf{n}$	மை	மொ	மோ	மௌ
$ \mathbf{y} $	<b>ILI</b>	யா	யி	மீ	щ	யூ	யெ	யே	யை	்பொ	யோ	யெள
r	Ŋ	ூர	πP	r <b>j</b> e	$^{\circ}$	C	செ	Gл	ை ச	ரொ	போ	<i>ு</i> ள
l	၈	லா	ରୀ	ର 🎖	அ		லெ	லே	<b>%</b>	லொ	லோ	வெள
v	ഖ	வா	வி		வு	$\mathfrak{A}$	வெ	வே	வை	வொ	வேர்	வெள
j	$\boldsymbol{\mathscr{F}}$	ழா	$\mathcal{P}$	$\mathcal{L}$	ழ	$\mathcal{G}$	ழெ	மூ	ழை	சொ	சூர	ழௌ
l	ள	ளா	ଗୀ	ର୍ଗ ।	ளு	ளு	ளெ	ளே	% ଅନ	ளொ	ளோ	ளெள
ŗ	ற	$ \mathcal{G} $	றி	௺	று	ூ	றெ	றே	றை	ெரு	$G_{\mathscr{Y}}$	றௌ
n	்ன	<u></u>	னி	னீ	<b>னு</b>	னூ	னெ	னே	रैं	ത്രെ	ලා	னௌ

### ADDITIONAL LETTERS AND CONTRACTIONS.

்ஷ்	ஷ	$\mathfrak{A}$	ஷீ	ஸ்	ബ.	00	TO .	்ளு	உ
sh	shă	shĭ	shî	S	să	ch	Month	Year	Om a sacred word

NUMERALS.

W **(b)** M**£** 2 /Fin Ŧт **6**T சூ <del>J</del> 2 3 4 5 6 9 10 100 8 1000 4

Examples of compound numbers,  $\omega = 11$ ,  $\omega = 12$  etc.

	ZF	END		
FORM	SOUND	FORM	SOUND	
N	a	5	z	FORM
w	à	Yu	ñ	39
د	i	m	t	39.5
ب	î	p	ţ	ಣ
,	u	ري د	th	ච
3	ù	9	d	္ဌ
٤	e (e)	२	dh	80 80 83 33
ξ	è	3	n	<u></u>
ιx	ê	ა	P	
$\mathcal{I}$	0	9	f	က
Þ	ò	رد	<b>b</b> .	9
μω	ào	€	ın	0
片	ań	_	y initial	හා
9	k	دد	y medial	С
Ø	kh	2	r	0
ω	q	Ļ	v initial	90
9	g	<b>)</b> )	v medial	9 01
	gh	evs	w	ည
و کد	'n	ىن	ç	Š
6	$\dot{\mathbf{c}}$ (ch)	m	sh	ල <b>ක</b> ට ද හට ව
٠ ب	j	w	s	Ş
eb	sh	ev	h	381
		11		

PUNCTUATION.

# BURMESE

VOWELS

FORM

SOUND

SOUND

39	a	0	è
39.5	â	39,	ey
ಣ	ie	ထြော	ăŭ
9	ee	60	au
10 00 G	u o	39	ăņ
8	û ōō	3908	âḥ
	CONSO	NANTS	
က	k	3	d
9	kh	6	dh
0	g	\$	n
ဃ	gh	0	P
С	ng & gn	9	ph
0	ch	Ö	b
90	chh	ဘ	bh
વ	j	ତ	m ·
ଠା	jh	ယ	y
ည	ñ	9	r
ඉ න දා දා	ţ	9 &	1
	ţh	0	w
SS 0- 2	ģ	သ	S
ಲ	dh ,	ဟ	h '
a	ú	\( \text{S} \) \( \text{S} \) \( \text{3} \)	ł
∞ ∞	t	35	aņ
$\infty$	th	39	

# CANARESE (CARNÀTACA).

This language, belonging to the Dravidian family, is spoken throughout the plateau of Mysore, in some of the western districts of the Nizam territory, and in the district of Canara on the Malabar coast.

		Malabar coast.		
<b>9</b> a	\$ ê	کٹ nga	න් ta	X ya
🕑 â	😂 ai	ಕ cha	ద్ద tha	ර ra
꾹 i (ee)	డు ం	್ chha	ර da	<b>ð</b> la
र्द्ध î (ēē)	ۇ <sub>لى</sub> ô	23 ja	な dha	න va
رخ u (00)	బ్ au	ψυ jha	ಕ na	න් sa
طِيءِ û (ōō)	<u> </u>	<b>എ</b> ña	క్ష pa	sha sha
<b>w</b> i	‡ h	සා t'a	క్ష pha	ُرِّہ za
<b>™</b> r'	<b>F</b> ka	ර t'ha	<b>v</b> ba	ka ha
<b>1</b> 1	<b>2</b> ) kha	ば d'a	ಭ bha	<b>8</b> la
<b>럽</b> 1'	<b>K</b> ga	් d'ha	మ ma	es sha
<b>ಎ</b> e	$\widetilde{\wp}$ gha	m n'a		
		LIGATURES		
₹ ki	<b>സ</b> ാ ñu	ವಾ dâ	ෙත් nna	る。 vâ
Fo ku	ದೆ d'e	යි di	ఘ <sub>pu</sub>	<b>y</b> vu
Svo kô	ವೆಂ d'o	යිල dî	ৰ্মৃ pra	ور vû
ವ ksha	වී ti	් de	95% bhu	න් <sup>℃ vr</sup>
مر ga	მ° ∙tî	💩 dri	<u>র</u> ্জ্ mma	ع کی مدنی
gî gî	ණ tu	ş n	o° râ	హ్రి vai
<b>∕</b> e gu	ලී te	<b>5</b> nâ	ට re	නු vvu
<b>%</b> ge	ළී{ tai	🔊 ni	စာ lâ	shâ
Ro gê	z ttu	în 96	ဃာ lû	& sht'a
ဦ gai	ළු tte	మ nu	on lô	⊳n hô
'ઇ જાિુ ñâ	ු ජූ tra	දී ne	<b>S</b> va	

GUJERATI OR GUZERATTEE.

This Alphabet is derived from the Sanscrit (Devanagari) characters, from which it principally differs in the omission of the connecting lines. Gujerati is spoken in the province of Gujerat (Guzerat), especially by the Parsee inhabitants, and is considered to be the mercantile language of Western India. In modern times various Gujerati publications have appeared in Bombay.

mod	ern times various Gu	gerati publications na	ave appeared in Bom	may.
<b>ઢ</b> ધા  ે	ઋો  ે ≽યો  ેે  ે	u cha	្ស ta ឧ tha	か) bha
<b>2</b> 71 ∫ i (ee)	ລແ−) ລູກໂ)	<b>a</b> ja	€ da	<b>H</b> ma
}	ani ow	<b>ા</b> jha	٤ dha	<b>4</b> va
(vo)	<b>૩</b> ૧ા <u>ે</u> )	Z t'a	<b>ન</b> na	(1 la
<b>3</b> i. <b>3</b> i. <b>3</b> i. <b>3</b> i. (00)	<b>%</b> ka	· <b>&amp;</b> t'ha	<b>ų</b> pa	2. ra
<b>3</b> i	<b>U</b> kha	र् <mark>ड</mark> d'a	🖔 pha	<b>21</b> sa
an E e (ai)	ol ga	<b>6</b> d'ha	<b>4</b> ba	<b>XI</b> ça
	<b>&amp;</b> gha	u n'a		& ha
		LIGATURES		
$m{\mathcal{K}}$ ki	et et ji	un'i	<b>ત્ર</b> nû	g vu
🖇 ku	<b>9</b> ju	₩ n'u	$\widehat{\mathbf{U}}$ pi	, 4 vû
<b>X</b> kû	on jû	<b>U</b> n'û	<b>y</b> թս	A li
<b>v</b> € khi	بر الح	M ti	<b>y</b> pû	녕 lu
y khu	J jhu	Ŋ tu	<b>M</b> phi	4 lû
भू khû	त्रु jhû टी t'i	ţ tû	<b>3</b> թհա	<b>A</b> ri
on gi		en thi	_	3 ru
N gu	<b>3</b> t'û		χ phû Μ bi	<b>3</b> rû
I gû	>	y thu		સ્ત્રી si
<b>M</b> ghi		thû	<b>y</b> bu	<b>3</b> su
<b>g</b> ghu	3 t'hu	<b>દી</b> di	oy bû	સુ su સ્ sû
y ghu y ghû	3 t'hu 3 t'hû 3 d'i	<b>3</b> du	n bhi	<b>e</b> l çi
chi	ł	埃 dâ 红 dhi	3 bhu	
3 chu	<b>પ્રું</b> તે'ઘ		bhû	<b>8</b> J. çu
d chû	🌠 d'û	g dhu	<b>H</b> mi	₹Ļ çû
chu chû chhi chhu chhû	d'hi	a dhû	3 mu	& hi
<b>છ</b> chhu	<b>3</b> d'hu	<b>A</b> ni	મુ mû વી vi	<b>≯</b> hu
& chhû	🏅 d'hû	3 nu	<b>4</b> 1 vi	<b>₹</b> hû

# **TELUGU**

one of the branches of the Drâvidian stock, is spoken along the eastern coast of India from the neighbourhood of Pulicat to Chicacole. Inland it extends to the eastern boundary of the Maratha Country and Mysore, including within its range the ceded districts and Kurnool, the greater part of the territories of the Nizam, the Hyderabad Country and a portion of the Nagpore Country. This language is spoken by about 14 millions.

e a	₽ ê	· H nga	ණ ta	<b>∀</b> ra
🖰 â	ک ĕ	ත cha_	🎸 tha	ව la
및 i (ee)	<b>ఓ</b> 0	ಭ chha	ර් da	ර va
ਲੱਖ î (ēē)	ث ô	පු ja	な dha	ਨ sa
<b>₩</b> u (00)	Tuo	ស្លា jha	さ na(soft)	sha
₩ û (ōō)	o ii	<b>2</b> nya	သံ pa	جهٔ sa
<i>√</i> 1, .	<b>i</b> h	ළා t'a	နှာ pha	€ ha
ىك نى	ち ka	ŏ t'ha	ည် ba	o ła
J i	₽ kha	な d'a	ಭ bha	o ⇔ sha
Joi'	🗙 ga	ශ් d'ha	మ ma	l Pause
<b>%</b> e	ow gha	ල n'a (hard)	∞ ya	• 1 0.000
		LIGATURES	•	
5° kâ	ψ jhâ	మా mâ	<b>9</b> ti	ຼື ව l, li
% ku	வு jhî	& mi	<b>5</b> tî	<b>ಲು</b> lu
‰ kû	ထား jhû	<b>ဿ်</b> mu	ණ tu	د اهم
<b>§</b> ° ko		ಮ .me	ම te	<b>g</b> lla
& ksha	Ar iig	ವು mo	ತ್ತು ttu	ဗ္ဗ lli
<b>7</b> ge	2 <sup>1</sup> ոս	My mmu	⊌ tra	သာ vâ
ぉ gê ∽	₹ nâ	ထာ yâ	ယာ dâ	र्ग vu
र्ने gau	∂ ni &î	ಯ yi	ඩ dî	る ve
ow ghâ	Ş nî ≼ nu	₩ ye	ක් du	නු vva
ow ghu	≈ nu	$\mathcal{Q}_{n}$ $\lambda_{0}$	る de	ವು vvu
رست ghû	73 ne 73 nna	ਨ râ	සී. do	. 8 si
	& po	ð ri	& ddu	
ஆு ngâ	ত্ত্য ppu	ეგენი proprieta	땅 ddhâ	shâ
ზა ngu ⊸ chi	න bâ	æ t'e	နာ dhâ	క్టు sht'a
	ක bu	ුරු d'u	ð rî	お sâ
	యా bhû	డు d'hu	ರು ru	ssâ.
æ che			1	

# BENGALI.

This Alphabet is based on the Devanagari character. In some instances the circular shape has been altered into an angular form, in others the form has been entirely changed. The Bengali language is less mixed than the neighbouring idioms.

vow 図a 図iá をii をiu が ui が ri れ ri	ELS.   与 lri   お lrí   引 e   ゴ ai   G o   お au   切 ang   あ ang   あ ah	不 ka 划 kha 对 ga 对 gha 以 nga 下 tsha 下 tshha 下 ja	CONSON  Sina  ta  tha  da  dha  na  ta  tha  ha  tha	NANTS.    省 dha   刊 na   刊 pa   证 pha   전 ba   전 bha   전 ma   전 ya   전 ra	可 la	THE VOWE sounded after the sounded after the sounded after the sound below letters. They re in such cases the lowing form that follows its figure in the follows are in the sound form that follows are the sound form that form that form the sound form the sound form that form the sound for
	wel-sound of	the short a is		1	sonant and is	<pre></pre>

inherent in all consonants.

- (birám) subjoined to a consonant causes the a to drop. A consonant moreover loses its a by being attached to the following consonant.
- J denotes y affixed to a consonant.
- denotes r. It is placed at the top of the letter, and sounded before it.
- pronounced after it.
- over a consonant, represents its nasal sound.
- denotes the word Ganesh.
- denotes the name of God.
- 1 serves as a stop at the end of a sentence.

### E VOWELS

d after the cons take their po-before, after and below their . They receive a cases the folwing forms.

follows its cons.

recedes » »

ollows » »

is subjoined

रे ai

take the cons. o in the middle.

au take the cons. in the middle.

ang follows the cons.

8 ah follows the cons.

# BÚGÍS

is supposed to be the most ancient of the languages spoken in the island of Celebes. The same Alphabet is used in the Macassar language.

~ a	ba ہے۔	ير ra	a la
-/ ka	• ma	つ cha	→ wa
₹ kha	<b>\(\mu\)</b> pha	o ja	= sa
→ ga	→ ta	<b>≈</b> a	⁻ <b>⇒</b> ha
👞 nga	• da	cc chha	🕶 ya
<b>~</b> pa	r na	= ra	

Every consonant has an inherent vowel, with which it forms a separate syllable.

The following vowels vary in position:

- l' e before a letter.
- J i over a letter.
- 1 o after a letter,
- . u under a letter.
- ung at the top of a letter.

# **JAVANESE**

ORDI	NARY LET	TERS	IN	TIAL LETT	TERS
Ordin. Form	Pasangans	Sound	Ordin. Form	Pasangans	Sound
· on · ·	an	hå	· . 0.0.0.0		Nå
· 140 · ·	 	nå		,	Tyå
· 657 · ·		tyå	· · · · · · ·	######################################	Kå
		rå	. എ		Tå
· ເໝ · ·	· · in.	kå	CAA or CA	<u>Q</u>	Så
. · ແກ່ · •		då	· · ‹ · · · · · · · · · · · · · · · · ·		På
. IGN	 ເຄ	tå	· (K) · ·		Nyå
· • • • • • • • • • • • • • • • • • • •	٠٠ ڪل ٠٠	så			Gå
• (C) • •		wå	· # · ·		Bå
. (0)	· · • • • · · ·	lå	UNCO	ONNECTED	VOWELS.
. ผา • •	•••	på			د س
· W1 · ·		då	a	i u	e o
· 16 · ·	· · · · · · ·	dyå			
		<b>y</b> å	•	'IONAL CON ur letters, with the	SONANTS. e sign & (Sastrosworo
	. મ	nyå	at the top, occur there are no c	r in words derive consonants in the	ed from the Arabic, a Javanese Alphabet,
· (E) · ·		må		n fully express th	
. 100	· · · · · · · ·	gå		stands for the A	
	· · · · · ·	bå	Ön få	» » »	» ف fe
· · · fJ · · ·		tå	i zå	» » »	» j ze
· m · ·	iක	ngå	ุกาั๊∩ ghâ	» » »	ghain غ
<b>~~~</b>		~~~~~			
. તુ	٠٠- حجا ٠	$\left  P \stackrel{\circ}{a} ext{-}tyere' ext{, rreve{e}}  ight $	200	NUMERAI	
· 13 · ·	Approximate relative	$Ng$ å- $letet$ , l $reve{e}$		1 3 9 4	an as an o
)			1 2 3	4 5 6	7 8 9 0

### VOWELS AND DIACRITICAL SIGNS,

called Sandangan.

Form	Name	Sound and power
0	Pĕpĕt	ĕ
a :::::::	Ulu or Wulu	i ·
٠٠٠ ر	Suku	u
	Taling	e
- 0 2	Taling-Tarung	0
	Paten or Pánkon	(deprives a consonant of its vowel)
•••	Ságnyan or Wîgnyan	h (at the end of a syllable)
::::::	Tyĕty'a	ng (at the end of a syllable)
,; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	Layar	r (at the end of a syllable)
. ( or ( .	Tyåkrå	1 (between a consonant and a succeeding letter)
٠٠ ئ ٠٠٠	Kĕrĕt	rĕ (after a consonant)
٠٠٠ ا	Pĭnkal	y (after a consonant)

### PODOS OR PADAS.

Under this designation the Javanese writing contains the following signs:

Podo luhur. With this sign superiors begin their letters to inferiors.

Podo madyo is used at the commencement of letters by persons of equal rank.

Podo andap, with this superscription an inferior addresses a superior.

Podo-bab stands at the beginning of a new paragraph.

Podo-lingso, the usual stop at the end of a sentence or a detached word. In poetry it marks the end of verses, which are written consecutively like prose. It is doubled at the end of a section.

- 2 Podo andegging lyelatu or dirgo muraras occasionally replaces the Podo-lingso; mostly it accompanies numerals, and isolates them from the adjoining words.
- Q Ulu munta. When the vowel of a final syllable is an ulu, this character takes a Tyety'a in the centre.
- J Suku mendut. When the vowel of the last syllable is a Suku it takes this form.
- Dirgo mure is the name of the sign placed over the Taling or Taling-Tarung, when this vowel occurs in the final syllable.
- 2 Podo watyan anglegenno. Under this name the Tarung is employed as a sign of separation.

Piselep ingstembarg gede, serves to divide poetry.

al an all

Purwo-podo stands at the beginning of poems.

Madyo-podo, at the beginning of a song following another, when the melody and the measure are changed.

Wasono-podo at the end of a poem.

### LIGATURES.

The following ligatures consist of the (Vowel-) sings Suku, Tyokro, Keret and Pinkal combined with the ordinary characters and Pansangans. The diacritical marks are also added.

5 27 27	5 7 0	# # # # # # # # # # # # # # # # # # #		4 4 4 5 5 5	3
			A P A C A A		F F OF OF OF OF OF OF

- The small pasangan Wo is placed below a letter standing in the third row.
- These small diacritical marks are placed under auxiliary letters which stand in the third row.
- The short Layar is employed when there is no room for the large Layar.
- This mark is placed under the letters Wo and Ngo to form the vowels u and o.

### OBSERVATIONS.

The Javanese language has 20 letters which are called Aksoro, Sastro or Tiarakan. They are written from left to right, without being joined together. By the many auxiliary letters, vowels and diacritical signs, the numbers of characters is considerably increased. The Pasangans, employed in the Alphabet, are in close connexion with the sign Paten, which in fact they replace. When a consonant occurs in the middle of a word, and is to be deprived of its vowel, a Paten must be employed. To

obviate a disjunction arising from the use of this sign, the *Paten* is omitted, but the letter, which follows the mute consonant, is changed in form or in position or in both. The substituting sign is then called *Pasangan*. The *Pasangans* being mostly placed under the common letters, while some vowels and diacritical signs figure above the letters, the Javanese writing runs within three rows. The position of a character in one row or an other is indicated in this Alphabet by the addition of dots.

# **TIBETAN**

Form	Value	Form	Value	VOWELS.
Л	k	お	m	The Tibetan language is read from left to right and has five vowels. The vowel a is inherent in the several consonants. When
<b>(</b> 2	kh	ঠ	ts	confusion is apprehended from the absence of a distinct <b>a</b> after the prefixes
ZJ	g	<b>₩</b>	tsh	the sign a is inserted to denote a. The remaining vowels are written and named as follows,
T .	ng	E	s	9 gigu i Zhabs-kyu u
3	ch	2	w	drengbu <b>e</b> naro <b>o</b>
\$	chh	a	j(French)	The gigu drengbu and naro are placed above their consonants, the zhabs-kyu below them. When double, the zhabs-kyu is pronounced <b>uu</b> or <b>ow</b> ; double drengbu <b>ay</b> or
E	j	ਸ਼	<b>Z</b> ,	ie; double naro oo or ou. Gigu is often formed thus $Q$
3	nya	æ	ha	is placed below the letters. <b>Ph</b> is changed by it into <b>f</b> ; <b>ss</b> into <b>x</b> . Under the other letters it represents the vowel <b>a</b> ; according to others it denotes <b>u</b> .
5	t	ध	У	o placed over th, a and h denotes with the first of these letters mce with the other two m. According to others it signifies ang and ong.
2	th	I I	r	ACCENTS.
Z	d	વા	l	↑ guttural sign ↑ palatal » ▶ nasal »
न्	n	-9	sh	7 sign of the singular number.
Z)	p	ষ্	s	PUNCTUATION.  is an introductory sign. Besides this figure other varieties are in use.
Z	ph	5	h	Comma. Two such signs are equal to a full stop. Four such strokes, with between them, denote "the end".
7	b	W	a	is inserted between the syllables.  o mark the stress of a word.

LIGATURES.

田田田衛祖祖祖朝祖田田田田

	Value		$\operatorname{sh}$	42	ರ	40	p	1	m	ch	•	<b>&gt;</b>	Ä	ය	<b>kh</b> guttural	r
		final	\$	þ			•	17	苓	•			•	1		4
0	Form	medial	\$	19	10	lo	ં નેજ	´ <b>r +</b>	LF	h	h	V	C	·C	÷	K
	F	l initial	<b>*</b>	¢	΄φ	\$	竹	l.h.	ţ	h	ν	V	C	10	ئ، ک	•
		unconnected	+	\$	7	र्ज	भि	Pr.	<u>I</u>	h	V	7	8	<b>),</b> £	3,	K
ISHU	Name		Sha	Ta	Da	${ m Te}$	De	La	Ma	Cha	Ja	Ya	Ke	Ge	Khe	Ra
MANTSH	Value		e 8	uı	 Germs	o ui s	ម <b>ភ</b>	ŷ	an	n	· ¥	$oldsymbol{g}$ aspirated	kh guttural	<b>b</b> soft	p aspirated	Z
				` _		φ	·φ									$\overline{C}$
	-	final	\ \-\	٠ ٦	6 6	P	·P	þ	<u>`</u>	~	<b>F</b> ''		•	Ģ	•	<b>≺</b> <b>≽</b>
	rm	medial final	<u> </u>	\frac{1}{\tau}	ν ν	P		þ	<del>آ</del>	<b>*</b>	F.,	: : :			•	<b>∀ ∀</b>
	Form		\ - -	\frac{1}{1}	V	P	· β	þ		<b>₽</b> \	ţ			φ	φ	
	Form	medial	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ç v X	P	,P	j j	ţ	٠ ہام	‡ \$	4	3.¢	φ	Ф	<b>&lt;</b>

		sound.	changes the letters into gutturals.	PUNCTUATION.  equal to semi-	TT equal to full stop.	THE NUMERALS are composed of letters, as	1 10 100	911 70 75 75	(1 <del>10</del> -	The Mantshu char-	acters are written from the top down- wards. The lines are read from left	to right, as	•	,,	<del>ڳج</del> kher	
		Value	bi	oq	nq	bo long	pi	po	nd	po long	ki	ku	me	re re	工作	ş ye
	Š	final	8	B	·B	8	4	\$	·\$	8	\$	Ġ.	山	mu init.		
	LIGATURES	medial	4	ф	ф	\$	$\stackrel{\scriptstyle V}{\wp}$	\$	·\$	\$	Ç	Ģ	ŭ	The second secon		<u></u>
	LI	initial	4	Ф	·B	\$	\$\sum_{\psi}^{\nu}	\$	<b>\B</b>	\$	ζ,	G	中	t ma	A mi init.	ê E
MANTSHU		unconnected	<b>φ</b>	Ф	φ	\$	9	\$	<b>,</b> \$	8	3	Œ	À	  Tt	М gge	S Sk
МA	Value			W	dz	tz	j (French)	$\infty$	chh	jh					प्रक्र	वृद्ध ne
		final	:		•	•	•	•		•		č	þ		m.	
	ın	medial	P	v	<b>K</b>	*	•		•			ORE CONS	<u> </u>	DIPHTHONGS.	16	مرد
	Form	initial	لله	v	K	*	ላ	7	ተነ	9V		CONSONANTS BEFORE	<b>!</b> "	DIPHI	ورا مرار 0 <u>i</u>	der ói
		unconnected	7	6	K	¥	7	¥	ના	ન		CONSOL	F		ν 	b 
		nuco									_ 1				ai	ei.

# **MONGOLIAN**

Initial

	CONSC	ONANTS	
Initial	Medial	Final	Value
<u>-ĩ</u>	Ţ	1 <	n
6	6	7	b
5,	**		ch Scotch
<i>\$</i>	ŢŢ		$\mathbf{gh}$ guttural
C	C	7 1	k
C	(		g
Ţ	Ţ.	V	m
$\supset$	7	7	1
7	F	\$	r
4	2	7	t ·
4	2	A 2	d
2	2.		у
2	۲		z, dz
=	7		ts or ch
٨	<b>^</b>	W 1	S
<b>√</b> "	<b>\</b> "		sh
2	2		w

### PUNCTUATION.

ᢒ

VOWELS

Final

Value

e

i

0

 $\mathbf{u}$ 

Ö

ü

as in German.

Medial

- This sign divides sentences.
- is used at the end of a period.

Mongolian books are not numbered by the page but by the folio. It is usual to head each folio by or some other mark like this.

### OBSERVATIONS.

Like the Mantshu the Mongolian characters are written in perpendicular lines from left to right. The Alphabet consists of seven vowels, together with diphthongs derived from them, and of seventeen consonants which vary in form according to their position at the beginning, the middle, and the end of a word; or according to the

effect exercised upon them by certain orthographical rules. — The consonants are not regarded as isolated sounds, but are always joined to vowels with which they form simple syllables. An exception is made to this rule when a consonant occurs as the final of a syllable or a word. But even such final consonants may be attended by a vowel. A variation of the Mongolian characters is known under the name of Galik.

# **ARMENIAN**

Form	Name	Value	Num power	Form	Name	Value	Num power.
C · w	Jpe	a	1	Մա	mien	m	200
Ռ <i>ը</i>	pien	p	<b>2</b>	3 J	he or ye	h or y (in	300
Գ <i>4</i>	kim	k ck	3	<b>՝</b> (, ն	noo	n	400
<b>ጉ</b> ተ	tah	t (soft)	4	ر, د	shah	sh	500
Ե <i>ե</i>	yetch	y (cons.)	5	<b>1</b> "	wo	WO(in word) orO(in move)	600
o, e	zah	Z	6	ع 2	tchah	tch	700
l; +	è·	e (in met)	7	<b>9</b> 4	bé	b	800
e e	yet	e (in paper)	8	9. 2	tché	ch (soft	900
(d)	twoh	t (hard)	9	Ռ ~	rah	r (hard)	1000
ֆ <i>+</i>	zhe	j (French)	10	<b>1</b> ] "	sé	S	2000
<b>ŀ</b> <i>l</i> :	inni	i (in ill)	20	પે. 4	viev	v	3000
l, L	lune	1	30	8	dune	d	4000
խ <i>խ</i>	khe	ch(German)	40	P P	ré	ľ (soft)	5000
D &	dzah	Z (Italian)	50	8 9	tzvoh	tz (hard)	6000
կ 4	ghien	g (hard)	60	<b>ኮ</b> ሬ	une '	ll (in due)	7000
<u>.</u> 5	kwoh	h	70	Ф 4	pure	p	8000
Q å	tzah	tz (soft)	80	ዓ <del>፣</del>	ké	k	9000
9. L	ghahd	γ(Romaic)	90	() °	0	0	10000
7 4	jé	j	100	\$ \$	pha	f	20000

### LIGATURES.

<b>Տև</b> հո	ls <b>ش</b>	<b>Л</b> 5 те	<i>- И</i> р mi	<b>%</b> mn
<b>∠</b> yev	E lu	<i>մ</i> լ mg	<i><b>ժե</b></i> mye	<b>½</b> vn

### ACCENTS AND PUNCTUATIONS.

acute	
' grave	
° circumflex	

'apostrophe

, comma

: colon or semicolon

rough breathing

. full stop > soft breathing hyphen

sign of length

sign of brevity and abbreviation

sign of abbreviation, it also converts a letter into a numeral.

# GEORGIAN.

The Georgian language is written in two Alphabets. The ancient character, used in the Bible and ecclesiastical works, is called  $Kh\bar{u}ts\bar{u}ri$  (i.e. sacerdotal). The character  $Mkhedr\bar{u}li$  (or rather  $Mkhedr\bar{u}li$  khėli i.e. Soldier's hand) is used in ordinary writing and printing.

	KHŪ	rsūri				MKHE	DRŪ	JLI	
Form	Value	Form	Value	Form	Name	Value	Form	Name	Value
<u>Ļ</u> 1;	a	Ь11	s	8	an	a	า)	un	00
ų, y	b ·	R p	t	ኔ	ban	b	ĝ	un	w
n,	g	Օւ պ	00	გ	gan	g	3	vĕ	vĕ
8 प्र	d	प्र	v	্	don	d	3	phar	ph
Tη	e	Pη	p'h	ี่ อ	en	e	1	khan	kh
Hy	w	中华	k	3	win	v	रु	ghan	gh (غ Arab
ЪЪ	z	N m	gh (Arab.)		zen	z	ข	qar	Arab ق)
Bfi)	h, ě (short)	$q_{\eta}$	$\mathbf{q}$	હ	he	e	a	shin	sh
(L) III	th	9 <i>y</i>	sh	တ	than	th	В	chin *	ch
ገገ	i	ի ի	ch	ဂ	in	i	ণ্ড	tzan	tz
<b>4</b> <i>h</i>	k'	Grը Մ	ts	3	kan	k	9	dzil	dz
r <sub>b ш</sub>	1 ,	Գ դ	ds	ထာ	las	1	8	thzil	thz
ታ ያ		1		9	man	m	용	jar	j
Кh	m	Rm E.	thz kh	6	nar	n	<b>Ե</b>	khan	kh (rough)
ე ი	n	E fi	khh	o	ie	i (short)	3	khhar	khh (very rough)
O. 111	i (short)	H4		m	on	0	<i>¥</i> ,	jan	j
	0	Phy	j k	3	par	p	car	hae	h
<b>U</b> 11	p	Dr	h (mute)	ป	zhan	j (French)	8	hoe	hoi
भ भ	j (French)		1	હ	rae	r	ф	fa	f
<b>Ժ</b> դ	r	5 <sub>5</sub>	ch	ŀ	san	s	3	short e	9
				ð	tar	t	•		

### PUNCTUATION.

- Hyphen

- : Full stop
- : End of a Period
- . Semicolon

, Comma.

### **GREEK**

Name	Value
Alpha	a
Beta	b
Gamma	g
Delta	d
Epsilon	${f e}$ short
Zeta	${f z}$
Eta	e long
Theta	h
Iota	i
Карра	k
Lambda	1
My	m
Ny	n
Xi	X
Omikron	o short
Pi	p
Rho	r
Sigma	S
Tau	t
Ypsīlon	u
Phi	f ph
Chi	ch
Psi	$\mathbf{p}\mathbf{s}$
Omĕga	0 long
	Alpha Beta Gamma Delta Epsilon Zeta Eta Theta Iota Kappa Lambda My Ny Xi Omikron Pi Rho Sigma Tau Ypsilon Phi Chi Psi

### OBSERVATIONS.

- γ before γ and the other palatals (x χ ξ) is pronounced liken, as έγγυς (eng-gus).
- t is a mere vowel and never represents the consonantal sound of y, as Ἰωνία΄ (I-onia). In foreign words the deficient consonant was replaced by t, as Ιούλιος (Julius).
- $\sigma$  is an initial and medial s. The final is marked by the sign of  $\varsigma$ . The latter is, in some modern editions, used at the end of medial syllables.
- τ before ι. followed by a vowel, retains its proper sound of ti, and is not pronounced like shi, as Γαλατια (Ga-la-ti-a).

## SPIRITS OR BREATHINGS.

Accents and Punctuation

Every Greek word, commencing with a vowel, has over this initial either

- (') spiritus lenis, the soft breathing.
- or (') spiritus asper, the rough breathing.

The former is aspirated before a vowel and equal to our h. The spiritus lenis is placed over an unaspirated initial vowel.

When a word commences with a diphthong ( $\alpha\iota$ ,  $\epsilon\iota$ ,  $o\iota$ ,  $\upsilon\iota$ ,  $\alpha\upsilon$ ,  $\epsilon\upsilon$ ,  $\eta\upsilon$ ,  $o\upsilon$ ,  $o\upsilon$ ,  $o\upsilon$ ), the breathings as well as the accents are placed over the second vowel, as  $\alpha \tilde{\upsilon} \tau o \varsigma$ ,  $o\tilde{\iota} o \varsigma$ ,  $\epsilon \tilde{\iota} \varkappa \dot{\omega} \upsilon$ .  $\rho$  always has the rough breathing at the beginning of a word. In the middle of a word, when this letter is doubled, the first  $\rho$  has the soft and the second the rough breathing, as  $\beta \dot{\rho}$ .

### ACCENTS.

- acute or sharp sound.
- ' grave or heavy sound.
- ~ circumflex or long and trailing sound.

Accents, combined with either of the breathings or with the discresis, are marked in the following manner,

21 21 11 11 11 5 6 11 11

### PUNCTUATION AND OTHER MARKS.

The point and comma are used in Greek as in English. There is no semicolon. The Colon is denoted by a dot over the line (\*). The note of interrogation is (;). In some modern editons the note of exclamation (!) has been introduced.

The Comma is also used to distinguish two words of equal spelling. As  $6,\tau\iota$ ,  $\tau \acute{o},\tau \epsilon$ , differing form the particles  $6\tau\iota$ ,  $\tau o\tau \epsilon$ . This sign is termed Diastole or Hyper-diastole.

The following signs are used in connexion with letters and syllables. The Apostrophe ('), the Diæresis (''), over a vowel separated from the sound of a preceding vowel, and the Coronis' in contracted words to denote a Crasis as τούναντίον for τὸ ἐναντίον.

Iota subscriptum is the Iota under the vowels  $\alpha$ ,  $\eta$ ,  $\omega$ , and indicates the etymology of the words. Formerly this  $\iota$  was pronounced, and had its place by the side of the vowel. This lateral Iota is still used in words spelled with capital letters, as THI  $\Sigma O\Phi IA$  (for  $\tau \tilde{\eta}$   $\sigma o\varphi \iota \alpha$ ) "A $\iota \delta \eta \varsigma$  ( $\tilde{\alpha} \delta \eta \varsigma$ ).

### NUMERALS.

The Greeks employed the letters of the alphabet to denote the numerals, but as these characters were not sufficient for this purpose, the  $\varsigma$  ( $B\alpha\tilde{\nu}$ ,  $_{\ast}Vau$ ) or  $\mathcal{F}$  (Digamma) was inserted after the  $\varepsilon$ , the  $\frac{1}{2}$  (Kó $\pi\pi\alpha$ ) after  $\pi$ , and  $\mathfrak{P}$  ( $\Sigma\alpha\mu\pi\tilde{\iota}$ ) after  $\omega$ . The letters employed as numerals are distinguished by a top line sloping, to the right as  $\alpha'$ 1,  $\beta'$ 2,  $\varsigma'$ 6,  $\iota'$ 10,  $\iota\alpha'$ 11,  $\kappa'$ 20,  $\kappa\varsigma'$ 26,  $\rho'$ 100,  $\sigma'$ 200,  $\sigma\lambda\beta'$ 232 etc. The thousands recommence with  $\alpha$ , and have a stroke below on the left, as  $\alpha$ 1000,  $\beta\sigma\lambda\beta'$ 2232.

GREEK LIGATURES AND ABBREVIATIONS.

These contractions are peculiar to old editions of Greek works. They are no longer used in modern typography.

		1		T		1	
α	$\alpha\iota$	i i	$\epsilon \tilde{l} \nu \alpha \iota$	8	ov	53	στι
av	$\alpha \nu$	+cn	દ્રેષ્ટ	1688	$oec{v}\deltaarepsilon$	50	στο
$\mathbb{N}$	$\alpha \lambda$	B	ελ	ું લંગ	ovz	26	στο
M	$\alpha\lambda\lambda$	r M	ελλ	िक्छे	$oec{v} au o\dot{v}$	50	$\sigma \tau v$
L	$ec{lpha}  u$	12/00	<b>ἔλαττον</b>	σ	$\pi$	500	στω
Σπο	$\vec{\alpha}\pi o$	cu	έν	, क्युं छु.	παρὰ	συ	$\sigma v$
ોંલુ -	άρ	3/5	ε̈́ξ	,	•	σω	σω
ας	$\alpha \varsigma$	105 105	$ec{\epsilon} \pi \epsilon \imath \delta \dot{\eta}$	गर्	πει	7	au
άυ	$\alpha \vec{v}$	1 1	•	क्ट्र	πευ	· Ca	τα
વ્યાનક	αὖτοῦ	7.00	έπευ	, wei	πεοί	13	ται
airry	αὐτῷ	140	$\dot{\epsilon}n\dot{\imath}$	$\pi lw$	$\pi\eta\nu$	77	$ aulpha  ilde{\imath}arsigma$
•	$oldsymbol{eta}$	J750	$\dot{\epsilon}\pi\iota$	1750	$\pi\pi$	7 m	ταῦτα
6 [		ं रेहा	έστι	$\pi \xi$	$\pi \varrho$	र्गु	τει
	$\gamma \\ \gamma \alpha$	8	arepsilon arphi	weg	$\pi \varrho o$	The	την
γα γ8	γά	lw	$\eta  u$	• <b>ग</b> री	$\pi  au$	1 7	$ au\dot{\eta} u$
√ √	-	θ	$\dot{oldsymbol{artheta}}$	$\pi v$	$\pi v$	، ځ	$ au ilde{\eta}arsigma$
У F	$\gamma\gamma$	9 <del>c</del> e	artheta lpha	75W	$\pi\omega$	· 2.	$\tau\iota$
y€	$\gamma\gamma \gamma \gamma \varepsilon$	9€	arthetaarepsilon	eg,	$\varrho \alpha$	, Je	το
×	γει	34	$artheta arepsilon \iota$	es	$\varrho\iota$	. 6	au o
'W	•	9n	$artheta\eta$	' 09	$\varrho o$	الح ا	$\tau \grave{o}$
	γελ	9n 91	$\vartheta \iota$	CE	σ	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	τὸν
M.	γελλ	<del>%</del>	artheta o	σα	$\sigma \alpha$		
\$ \%	$\gamma \epsilon \nu$	90	eta v	Gar	$\sigma lpha  ilde{v}  au lpha$	<i>ਾ</i> ઇ 1	au o v
	γεφ	Jω	$artheta\omega$	σε	σε	**************************************	$ au o  ilde v \  au o  ilde v$
m	$\gamma\eta$	naj	$z\alpha i$	od .	σει	8 %	
<b>%</b>	$\gamma \iota$ .		zαì	ση	$\sigma\eta$		au o  ilde v
T	γίνεται	· Ry	$z\alpha i$	olw	$\sigma\eta u$	3	τρο
$\gamma^{\nu}$	$\gamma \nu$	M	κατὰ	ه،	$\sigma \theta$	' मी	π
30	γο		κατὰ	्र - अ - %	$\sigma \theta \alpha \iota$	<i>דט</i>	$\tau v$
H	$\gamma \varrho$	NE	zata	192	$\sigma \chi$	$\tau \omega$	$ au \varphi$
$\gamma \nu$	$\gamma v$		εφάλαιον	σ	$\sigma \iota$	τω ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$ au \widetilde{arphi}$
<b>γω</b> N	$\gamma \omega$	<i>XX</i>	λλ	σκ	$\sigma z$		$ au \widetilde{\omega}  u$
01	$\boldsymbol{\delta}$	Miss.	μάτων	σο	σο	**************************************	$ au \widetilde{w}  u$
̈́̈̈	$\delta \dot{\epsilon}$	Ti	μὲν	.6	σο	15	$ ilde{v}$
286	$\delta arepsilon arphi$	μλί	μὲν	· ao	$\sigma\pi$	* 4	$v\iota$
WE	$\delta \epsilon \xi$	μ̈́S	μένος	1 com		w	vv
	δια	UT	μετά	105	σσ	i Gas	$\dot{m v}\pi$
212		100		5	$\sigma  au$	ا نحمت	<i>ὑπο</i>
$\Delta  g$	διὰ	M	μετὰ ~	, 5th	στα	$\times_{h}$	χαν
do	$\delta \varrho$	e wis	$\mu \tilde{\omega} \nu$	158	στε	2.	$\chi\iota$
લ	ει	• 5	oto $ u$	154	στει	25	$\chi_Q$
4	$\epsilon\iota$	6	os	571	στη	4	$\psi\iota$

## ROMAIC OR MODERN GREEK.

The Alphabet consists of the following 24 letters, which are the same as in ancient Greek.

A α, B β, Γ γ, Δ δ, E ε, Z ζ, H η, Θ  $\Im$ , I ι, K κ, Λ λ, M μ, N ν, Ξ ξ, Ο ο, Π π, P ρ, Σ σ (final ζ), Τ τ, Υ υ, Φ φ, X χ, Ψ ψ, Ω ω.

The vowels are  $\alpha$ ,  $\epsilon$ ,  $\eta$ ,  $\iota$ , o, v and  $\omega$ .

### PRONUNCIATION.

A α (Alpha) short or long as in papa.

- B β (Vita) is represented by bh or v. In sound it differs slightly from the English v, the mouth being somewhat rounded in the articulation of the Romaic letter.
- Γ γ (Gamma) is an aspirate of g in go. In γγ the first gamma becomes nasal; αγγελος, for instance, is pronounced ang-ye-los. It receives the same sound before the palatals x ξ and χ, as αναγχη (a-nang-ki). Before ε ι and υ it is like y in yes. To produce the sound of our g in grey, the Modern Greeks use Γ'x as Γ'xρέγραμ (Graham).
- $\Delta$   $\delta$  (Delta) is aspirated as th in the.
- E  $\epsilon$  (Epsilon) as the e in pet.
- Z ζ (Zita) like z.  $Zω\dot{η}$  (zo- $\ddot{\imath}$ ).
- $\Theta \ \vartheta \ (Thita)$  like th in thick.
- I t (Iota) like i in machine. When t is placed under the vowels as in  $\alpha$   $\eta$   $\omega$  or by the side of capital vowels (At, Ht,  $\Omega$ t) it is not sounded and only lengthens the principal vowel. This t is known as the Iota subscriptum.
- K x (Kappa) like our k. It is softened after the nasal γ hence άγκλιά is pronounced angliά.
- $\Lambda$   $\lambda$  (Lamvda) like l in long. Before  $\iota$  it has the sound of lli in William.
- M μ (Mi) like m. Placed before π, these two letters acquire the sound of b μπαρούτι (barooti). This combination of μπ takes the sound of b in words received from foreign languages, but in compound Romaic words, each letter retains its original pronunciation. Example εμπύρευμα (empee-reo-ma).
- N  $\nu$  (Ni) is n. Placed before  $\tau$ , the two letters coalesce in the sound of d, which is articulated somewhat harder than the  $\delta$ . For example  $\upsilon\tau\iota(\imath\alpha\upsilon\iota\ (diwani)$ .  $\upsilon\tau\zeta$  have conjointly the sound of j; as  $\upsilon\tau\zeta\alpha\mu\iota\ (jami)$ . When the letters  $\upsilon$  and  $\tau$  form part of two syllables in a compound word, they retain their natural sound of nt. For example  $\varepsilon\upsilon\tau\iota\mu\iota\varsigma\varsigma\ (en-timos)$ . Before the vowel  $\iota$  the  $\upsilon$  is articulated like ni in opinion as  $\upsilon\iota\tau\tau\omega\ (nyipto)$ .
- $\Xi \xi (Xi)$  is X.
- O o (Omikron) like o in dot.
- $\Pi$   $\pi$  (Pi) like p.
- P  $\rho$  (Ro) like r in rod. If doubled, it has a sharper sound.
- Σ σ (Sigma) like s in so. Before B,  $\Gamma$ ,  $\Delta$ , Z,  $\Lambda$ , M, N, P and in the proclitics (such as  $\tau \sigma \dot{\nu} \varsigma \tau \dot{\alpha} \varsigma$ ) before the same consonants, the Sigma is sounded like z, as Σμύρνη (Zmírni).
- T τ (Taph) is t.  $\tau\zeta$  sounds sometimes like ts, but generally like ch, as  $\tau\zeta$ ελε $\pi\eta$ ς (chelepis). Words with  $\tau\zeta$  are mostly of foreign origin.
- $\Upsilon$  v (Ypsilon) lik y in Egypt. For example  $\tau \rho \nu \beta \lambda tov$  (trivition).
- $\Phi \varphi (Phi)$  like f or ph.
- X 
  ightharpoonup (Khi or Chi) like the German or Scotch ch. Before the vowels a, o, u, it is more harsh than before e and i.
- $\Psi \ \psi \ (Psi)$  like ps in gipsy.
- $\Omega$   $\omega$  (Omega) is the long o.
- The following are diphthongs  $\alpha\iota$ ,  $\alpha\upsilon$ ,  $\epsilon\iota$ ,  $\epsilon\upsilon$ ,  $\gamma\upsilon$ ,  $\upsilon\iota$  and  $\varepsilon\iota$  (8). At sounds like e in ethics. The  $\upsilon$

of an,  $\epsilon \nu$ ,  $\eta \nu$  sounds like  $\beta$  before a vowel, or the soft and liquid letters  $\beta$ ,  $\gamma$ ,  $\delta$ ,  $\zeta$ ,  $\lambda$ ,  $\mu$ ,  $\nu$ ,  $\rho$ . — or is like ee and on like oo in good.

The diæresis over the second vowel of diphthongs restores to each vowel its original sound;  $\alpha \ddot{\imath}, \alpha \ddot{\jmath}, \epsilon \ddot{\imath}, \epsilon \ddot{\imath}$  are pronounced separately  $\alpha \cdot \iota, \alpha \cdot \iota$  &c.

#### BREATHINGS AND PUNCTUATION.

The Romaic or Modern Greek admits like the ancient language two marks over initial vowels, namely the Smooth breathing Spiritus lenis ('), which is not noticed in reading, and the Rough breathing Spiritus asper ('), which in classical Greek takes the sound of our h, but is not audible in the modern language. The  $\rho$ , as an initial, is invariably marked with the rough breathing. In double the first has the smooth and the second the rough breathing.

The names of the stops are, τελεια, full stop (.), μισοστιγμή colon ('), υποστιγμή or υποδιαστολή comma (,) and σημείον ερωτήσεως sign of interrogation (;). The mark of exclamation (!) is rarely used.

To these signs must be added the apostrophe and the diæresis. The former (') denotes the elision of one or more vowels. E. g. ἀπ' ἐμένα, ἀφ' ημᾶς instead of απο etc. This elision of vowels occurs even before consonants as 'απ' τὸ instead of ἀπὸ τὸ.

In καν (instead of και αν) and κανένας (instead of και αν ένας) etc, the mark (') denotes the coalescence of vowels (κράσις) and is called coronis. This mark is often used in contractions as μούκοψαν τὸ χέρι.

The diæresis prevents the union of diphthongs. E. g. μποιαντζής sounds bo-y-an-jis.

Another mark of separation is the diastole (,), which resembles the comma, and is used to distinguish the pronoun β, τι and the adverb τό, τε from the conjunction ὅτι and the adverb τότε.

### ACCENTS.

The tone is indicated by three accents, namely the circumflex (περισπωμένη) σr long accent, the acute (ὁγεῖα) or sharp accent, and the grave (βαρεῖα) or heavy accent in final syllables. Some monosyllabic words, being unaccented, are called atona. The circumflex can only be placed on the ultimate and penultimate syllable. When the vowel of a final syllable is long, the penultimate vowel cannot take the circumflex. A word is termed perispomenon, when it has the circumflex on its last syllable, or if it is a monosyllable and is marked with this accent. When the circumflex occurs over the penult, the word is properispomenon.

The Acute takes its place in the penultimate and ante-penultimate syllable. Also on the final syllable at the end of a period, or when an enclitic follows (i, e, a word like μοῦ, μοὶ, μέ which throws its accent on the antecedent).

When the final syllable is long, the acute cannot revert to the ante-penultimate.

When the acute occurs in a monosyllable or in a final syllable, the word is called oxytonon; the penultimate, thus accented, is called paroxytonon; and the ante-penultimate with the acute is proparoxytonon.

# OLD-SLAVONIC (CYRIL)

Based on the most ancient MSS, and cut under the direction of the I. R. Aulic Councillor Dr. Paul Jos. Schafarik at the type-factory of Gottlieb Haase Söhne in Prague.

Fo	rm	Name	Value	Form	Name	Value
A	a	Az	a	ФФ	Fert	f, ph
Б	6	Buky	b	Xx	Chěr	kh
B	В	Vědi	V	ω ω	Ó	ó
Г	Г	Glagol'	g	<b>Ö</b> ö	Ot	ot
Д	Д	Dobro	d	Цц	Ci	ts
E	E	Est'	e	YY	$\check{\mathbf{C}}\mathbf{erv}'$	č
<b>*</b>	ж	Živěte	ž	ա ա	Ša	š
S	S	Zělo	z	μψ	Šta	št, šč
Z	Z	Zemlja	z	A A	Jer	_
H	H	lže	i	ir II	Jery	y
Ϊ	ï	1	i	Ыы	Jery	y
1	1	I	i, y	Ьь	Jerek	
K	ĸ	Kako	k	# A	Jeť	ě
Λ	Λ	Ljudi	1	Юю	Ju	yu
M	M	Myslite	m	ta a	Ja	ya
N	N	Naš »	n	₩ не	Je	ye
0	0	On	0	A A	Ęs	ę
N	n	Pokoj	p	жж	Ąs	ą
P	ρ	Rci (Reci)	r	HA HA	Jęs	yę
C	C	Slovo	s	<b>W R</b>	Jąs	yą
T	T	Tverdo	t	<b>3</b> 3	Ksi	X
ħ	ħ	Těrv'	ť	<b>1</b>	Psi	ps
OΥ	oy	Uk	u	<b>9</b> •	Thita	th
<b>ຮ</b> ໍ	8	Uk	u	Y v	lžica	y

### NUMERICAL LETTERS.

а· ·в· ·г· ·д· ·е· etc. ·аі· ·ві· ·гі· ·ді· ·еі· etc. ·ка· ·кв· ·кг· ·кд· ·ке· etc. 11 12 13 14 15 24 22 232 3 4 5  $_{f} = 1000$ , E. g.  $_{f}$ arca = 6396.  $\mathbf{s} = \mathbf{s} = \mathbf{6}$ c = r = 90

### ABBREVIATIONS (IN SLAVONIC TITLY).

- Titla (simple).
- Oneček.

- △ Dobro Titla.
- <sup>®</sup> Slovo-Titla.
- Pajerek.

#### NOTES.

- 1) The power and pronunciation of the accented
- 1) The power and pronunciation of the accented (Roman) characters are sufficiently explained in the Polish and Czechian Alphabets.

  2) The alphabetical names have been rectified and, as regards the nasals, completed according to approved ancient authorities.

  3) The characters are designed to be printed without the abbreviations, which as relics of the
- middle ages must be restricted to ecclesiastical works. Here they are solely introduced as historical forms. The "Pajerek" is a Jer or Jerek placed over a letter.
- 4) As in ancient MSS, the numbers are indicated by the insertion of the letters between two dots. The "Titla" formerly used have thus become unnecessary.

### GLAGOLITIC.

According to ancient MSS (sec. XI—XII) designed by Dr. Paul Jos. Schafarik, cut at the type-factory of Gottlieb Haase Söhne in Prague.

Form		Name	Value		Num:	Form		Name	. Value		Num
			Cyrill.	Latin	value				Cyrill.	Latin	value
ተ	ተ	$\mathbf{A}\mathbf{z}$	a	a	1	<b>33</b>	<b>3</b> 3	Uk	oy	u	400
쁜	쁜	Buky	6	b	2	φ	φ)	п.		6 )	-00
${\boldsymbol \vartheta}$	જ	Vědi	B	v	3	o∰e	₼ \	Fert	Ф	f, ph	500
%	%	Glagol'	Г	g	4	b	b	Chěr	X	ch	600
${\bf \vartheta}$	ռ	Dobro	Д	d	5	0	Ф	Ó	ω	ύ	700
3	3	Esť	€	e	6	ጸ	ଞ	Šta	th	št	800
<b>%</b>	36	Živěte	ж	Ž	7	V	V	Ci	ų	c	900
<b>♦</b>	&	Zělo	\$	${f z}$	8	<i>₹</i> 3	43	Červ'	Y	č	1000
$\Theta_0$	θ <sub>0</sub>	Zemlja	Z	Z	9	Ш	ш	Ša	เม	Š.	
8	ሞ	Iže	Ħ	i	10						
8	8	I	1	i	20	-83	<sub>2</sub> 8	Jer	7.	$\frac{0}{e}$	
M	NR }	Děrv' o.	<b></b>	dj, j	30	88	PB 2	Jery	Li	y	
	(	Jot	7, •	(4), J		8	8)		į	e	
5	þ	Kako	к	k	40	1	1 \	Jerek	Ь	e i	
જ	ൿ	Ljudi	A	l	50	A	A	Jeť	T	ě, <b>j</b> a	
<b>3</b> 78	88 )	M 1			20	P	P	Ju	10	ju	
M	m \	Myslite	M	m	60	€	€	Ęs	A	ę	
P	P	Naš	11	n	70	<b>∌€</b>	<b>3€</b>	As	Ж	ą	
9	9	On	0	0	80	<b>Э€</b>	эє	Jęs	ł.	ję	
<b>t</b> o	P	Pokoj	'n	p	90	æ€	\$€	Jąs	1%	ją	
Ь	Ь	R'ci	ρ	r	100	⊕	<b>ው</b>	Thita	•	th	-
8	8	Slovo	c	S	200	g.	8	Ižica	Y	y	
W	W	Tvr'do	T	t	300						

### NOTES.

- 1. The letter Jery is a compound of Jer and Ize.
- 2. The letters \$\frac{\pi}{\pi} \mathbb{M}\$ and \$\frac{\pi}{\pi} \text{ are duplicate forms. } \$\frac{\pi}{\pi}\$ and \$\frac{\pi}{\pi}\$ are peculiar to Bulgarian MSS; \$\mathbb{M}\$ and \$\pi\$ are Croatian characters. \$\frac{\pi}{\pi}\$ on the other hand is not a real duplicate form of \$\phi\$, it being identical with \$\phi\$, which is used instead of \$\phi\$.
- 3. These characters are arranged to be printed without abbreviations, which are confined to liturgical books.
- 4. The numerical power of the letters is indicated by dots on both sides, as ... etc.
- 5. Further information on the value and the pronunciation of the accented letters is given in the Czechian and Polish Alphabets.

# CROATO-GLAGOLITIC.

Designed from Croatian MSS and printed works by Dr. Paul Jos. Schafarik; cut at the type-factory of Gottlieb Haase Söhne in Prague.

Fo	rm	Name	Value	Num: value	Form		Name	Value	Num: value
ъ	Т	Az	a	4	<b>3 E</b> E	EE EE	Uk	u	400
世	쁜	Buky	b	2	Ф	ф	Fert	f, ph	500
00	00	Vědi	v	3	Ы	6	Chěr	kh (ch)	600
<b>%</b>	<b>%</b> 1	Glagol'	${f g}$	4	0 0	Ç	Ó	ó	700
П	Пъ	Dobro	d	5	W 1	₩	Šta	št	800
3	3	Est'	e	6	P V	v	Ci	ts	900
Ď	Щ	Živěte	ž	7	公 经	<b>25</b>	Červ'	č	1000
出	番	Zělo	Z	. 8	Шι	Ш	Ša	š	
Pa	θn	Zemlja	z	9	-8 -	8	Jer	$\frac{\mathbf{o}}{\mathbf{e}}$	
æ	<b>P</b>	Iže	i	10	all a	B	901	e	
8	8	I	i	20	H	88	Jery	y	
ПP	ПP	Děrv'	d., .,	20	#BW #	392	Jery.	J	
111	III	( č. Jot )	dy, y	30	-8 -8	8	Jerek ·	$\frac{\mathbf{e}}{\mathbf{i}}$	
፟	Ļ	Kako	k	40	ΙT	ſ	Jerek	i	
吊	Ф	Ljudi	I	50	A A	<b>B</b>	Jet'	ě, ya	
$\mathbf{M}$	M	Myslite	m	60	-	0	Ju	yu	
P	P	Naš	n	70	11	3	Ęs.	ę	
B	8	On	0	80		3€	As g	ą	
la	Ū.	Pokoj	p	90		<b>3€</b>	Jęs	yę	
Б	Б	R'ci	r	100	<b>क€</b> 4	348	Jąs	yą	
ል	В	Slovo	s	200		<b></b>	Thita	th	
00	00	Tvr'do	t	300	<b>₽</b> ₹	<b>B</b> -	Ižica	y	

### NOTES.

- 1. These characters are designed to be printed without the abbreviations, peculiar to liturgical works.
- 2. The numerical letters are distinguished by dots on both sides, as .本. . etc.
- 3. The punctuation is the same as in other languages.
- 4. The letters £, Æ, Æ and Æ£, the forms B and B, together with the combinations B and B, are only found in Bulgarian MSS. The ligature Æ instead of 33 only occurs in Croatian MSS.
- 5. The value and pronunciation of the accented Roman characters may be ascertained by referring to the Czechian and Polish Alphabets.

# RUSSIAN

Б б В в	$egin{array}{c c} I_{ m talic} & & & \\ \hline A & a & & \\ B & m{6} & & \end{array}$	As		
Б б В В		As		
Вв	Бб	110	a	The Russian Alphabet consists of 35 letters. Ecclesiasti-
		Buki	b	cal and Old-Russian works,
Гг	$B$ $\epsilon$	Vyedi	v ff	being written in the ancient Slavonic character, contain the
	$oldsymbol{arGamma}$	Glagol	g gh	following additional letters, s (Selo) s, b or 8 (Ik) u,
Д д	A A 0	Dobro	d	$\omega$ (Ot) o, in (Yuss) io, $\hat{\omega}$ (O) $\hat{o}$ ,
Ее	E $e$	Yest	é yé yo o	$\mathfrak{F}(Ksi) x, \Psi(Psi) ps.$ In ecclesiastical books these
Жж	Ж ж	Zhivete	zh sh	letters serve as numerals, and are arranged as in Greek. The
3 3	З з	Zemla	Z	sign is placed over numerical letters.
ИЙ ий А	ИЙ ий	Izhe	i	
I i ï	I i i	I	i	a has the sounds of bar and bat.  6 like b. Before the strong
Кк	$K \kappa$	Kako	k ck	consonants and as a final letter it sounds like p.
Л л	$\boldsymbol{J}$ $\boldsymbol{J}$	Lïudi	1	в 1) At the beginning of a syl-
Мм	M $m$	Muislete	m	lable and before A H p like v. 2) As a final, and before a hard
Н н	<b>Н</b> н .	Nash	n	consonant, like ff. r 1) As an initial and medial
0 о	<b>0</b> o	On	o a	letter nearly like g in give, but
Пп	$\Pi$ $\dot{n}$	Pokoi	$\mid \mathbf{p} \mid$	with a hard Hibernian aspiration. 2) As a final, or before sh,
Рр	P $p$	Rtsui	r	like k. 3) In ecclesiastical pronunciation it is aspirated like
- ;	C $c$	Slovo	s	h. In some words, especially
Ттш	T r m	$\mathbf{T}\mathbf{verdo}$	t	foreign, it sounds like <i>ch</i> in the Scotch <i>loch</i> . 4) The adjectival
$\mathbf{y}$ $\mathbf{y}$	$\mathbf{y}$ $\mathbf{y}$	U	u	and pronominal ending ro is commonly pronounced vo, and
$\Phi$ $\Phi$	$\Phi$ $\phi$	Fert	ph f	in inferior style it is even spelled
X x	X x	Kherr	kh (ch in Ger.)	
Цц	II y	Tsui	ts	e 1) At the beginning of syllables like yai. 2) At the end of
Чч	$\boldsymbol{q}_{-\boldsymbol{u}}$	Tsherv	ch	syllables like e in met, with a feeble y before it. After sibi-
Шш	III u	Sha	sh	lants this $y$ is not heard. 3)
Щщ	Щ щ	Shtsha	shch	When accented it sounds like yeo in yeoman, and after <b>ж</b> ч ш
$\mathbf{a}^{\perp}\mathbf{d}$	<b>B</b> 8	Yerr	hard suffix	щ ц like o in go. This rule is applied a) before a consonant
Ыы	$\boldsymbol{M}$ $\boldsymbol{b}\boldsymbol{l}$	Yerui	ui i thick	followed by the vowels $a, o, y$ ,
Ьь	$\boldsymbol{b}$ $\boldsymbol{b}$	Yer	soft suffix	ы, ъ; b) at the end of a word; c) in the instrumental case ею
<b>क</b> क	<b>В 16</b> в	Yat	yé éyo	or en of nouns fem. sing; $d$ ) before $\mathbf{r}$ , $\mathbf{\kappa}$ , $\mathbf{x}$ , and the sibilants
Э э	<b>9</b> 9	E	è	ж, ш. e) in the present tense.
Юю	Юю	Yu	y00 Fr.	In improved spelling the sound of $yo$ or $o$ is indicated by $\ddot{e}$ . This
<b>я</b> Я	$\boldsymbol{R}$	Ya	ya yè	ë also denotes the French sound of eu.
. Ө	$\boldsymbol{\theta}$ $\theta$	Fita	f	<b><math>\mathbf{x}</math></b> like $j$ in the French word
V v	V v	Izhitza	y v	jour.  u and i sound alike.

### RUSSIAN

		$\mathbf{n}$	JOSIAN									
Observations	CURRENT HAND											
л final, attended by ъ, sounds very hard.	$\mathcal{A}$	$\mathcal{A}$	$\alpha \alpha$	A	a	$\mathcal{M}$	Me	m n	7 T	T		
o accented, sounds like the oin go. When unaccented	8	$\mathcal{T}$	66°	Б	б	Y	$\mathcal{Y}$	y y	<b>y</b>	y		
it is pronounced like the $a$ in $far$ .	6	${\mathscr{B}}$	n e b	В	В	95	$\mathcal{S}$	.95 g	вф	Φ		
x is a stronger guttural than ch in the Scotch loch. п like tz in Fritz.	$\mathcal{J}$	${\mathcal T}$	F 1	Γ	Г		$\mathcal{X}$					
ч ordinarily like ch in church. In что (what) and be-	<u>A</u>	$\mathscr{D}$	$g \partial g$	Д	Д	$I_{f}$	U,	и, ц	Ш	Ц		
fore nit takes the sound of sh.  m consists of the sounds	$\mathscr{E}$	$\mathcal{E}$	$\varepsilon$ $e$	E	e	$\mathscr{U}$	U	7 z	Ч	ч		
of sh-ch. A notion of its pronunciation may be formed	$\mathscr{H}$	$\mathcal{M}$	z »c	Ж	ж	111	$\mathcal{U}$	<b>III</b> 111	и Ш	l ш		
by a connected articulation of the letters $sh$ - $chi$ in the words $English$ <b>chi</b> ldren.	11		3 3	3	3	111,	Ulf	111, 111,	; Ш	( щ		
ъ after a final consonant produces a hard and ringing	II	$\mathcal{U}$	0	И	И		$\mathscr{C}$					
sound.  ь is placed at the end of	$\mathcal{J}$	F	i $i$	I	ï	$\mathcal{B}l$	6l	લ હા	Ы	ы		
words where it softens the preceding consonant, and	$\mathscr{K}$	K	$\kappa$ k	К	К	$\mathcal{J}$	6	6 6	Ь	Ь		
adds to it the sound of ye, such as is heard in the French pronunciation of Charle-	$\mathcal{I}$	$\mathcal {A}$	L s	Л	Л	$\mathcal{Z}$	$\mathscr{H}$	16 16	ъ	ъ		
magne. In the middle of a word, mostly between two	M	$\mathcal{M}$	Su M	M	M		Ġ	э	Э	Э		
consonants, it is uttered with a slight sound of ee.	<i>H</i>	$\mathcal{H}$	H H	Н	Н	FO	<i>F0</i>	10 H	<b>ж</b>	) ю		
ы is identical with the Polish y, and somewhat like	l	0		0	0	${\mathscr A}$	${\mathscr R}$	a A	: Я	я		
the English we, when rapidly articulated.		$\mathcal T$		П	П	0	$\Theta$	0 0	Θ	Θ		
$\pm$ as an initial like $yai$ . The $y$ of this diphthong is	P	P	0.4			$\mathcal{T}$	9)	r	, v	v		

other consonants.

3 This reversed e is the initial of words commencing with the sound ai. It occurs in foreign words in which it replaces oe.

also sounded in the middle of a syllable after n, but is scarcely audible after the

no sounds like ew. In foreign words it is similar to the French u.

**A** when accented, sounds like ya in yard. In unaccented initial syllables it sounds ye. After consonants it is pronounced like e in met. As a final letter it takes the sound of ya in yard.

 $\theta$  represents the same Greek letter but is pronounced like F. In modern derivations from the Greek it is replaced by F.

v only occurs in Greek words. At the beginning of a word or after a consonant it sounds like ee, and after a vowel like v.

The letters h, c, x, f, do not occur in the Russian alphabet. They are represented as follows: 1) h is replaced by  $\mathbf{r}$ , as in  $\mathbf{\Gamma}$ am $\mathbf{f}$ ypr $\mathbf{r}$  $\mathbf{f}$ Hamburg, or it is omitted altogether, especially

in Latin words as Аннибалъ, Hannibal. 2) c before e, i, y, sounding like the German z or tz, is expressed by  $\mathbf{n}$  as Циперонъ, and before a, o, u by k, as Коллегія. 3) x is expressed by  $\mathbf{n}$  as Алексъй (Alexius). 4) f and the German v are changed into  $\Phi$ , as  $\Phi$ ридрихъ Frederick.

 $\mathbf{C}$ 

### DIPHTHONGS.

Proper diphthongs are only formed by the n following a vowel. This letter receives in such a case a characteristic sign at the top (й). The diphthongs are ай ей їй ой уй ый ъй эй юй яй.

### ACCENTS.

The stress of an accented vowel is indicated by the acute (') and the grave ('). The former denotes the raising, the latter the depression of the tone. The accents are only then marked in writing, when corresponding forms are to be distinguished from one another. They are placed over the following vowels

аеніоуы ъэя у.

### SERVIAN.

(Modern form, cut by F. Rösch in Leipzic.)

This language is divided into the dialects of the Herzegovina, of Ressava and Syrmia. The Servians use the Slavonic (Cyrillic), the Croats and Wends the Roman characters.

#### Cyrillic Latin Pronunciation Α a A a a Б б В b b B В V V V $\Gamma$ $\Gamma$ G $\it {\it A}$ D $\boldsymbol{A}$ d d ₽ ħ Di dj dy, Hungarian gy ${f E}$ e E $\mathbf{e}$ Ж Ž Ж ž j in French 3 $\mathbf{Z}$ 3 Z Z И И I i I I y J J j К K К k k Л Л L 1 Љъ ly, Ital. gl, gli Lį lj M M M m $\mathbf{m}$ H Н N n n Њњ Nj ñ Ital. and Fr. ng nj 0 0 $\mathbf{0}$ 0 П П P p P R p r r $\mathbf{C}$ S c $\mathbf{S}$ S T $\mathbf{T}$ T t $\mathbf{h}$ ħ Ć ć ty, tj $\mathbf{y}$ U y u u Φ F f Φ X $\mathbf{X}$ H h II $\mathbf{C}$ Ц c tsЧ Č č Ч ch Ш Š Ш š sh Ш Šć šć shch Ъ Ъ hardening suffix Ы Ы ee, French U Ь Ь softening suffix Ŧ Ъ Je je ě ie yé, ié $\mathbf{\epsilon}$ $\epsilon$ Je je yé Ю Ю Ju ju yū R $\mathbf{R}$ Ja ja yā П П Dž dž j Θ Θ Th th th

### ILLYRIAN.

Nr. I represents the "organic" orthography now used in Roman-Catholic publications; Nrs. II and III are to some extent current in Slavonia,

Croatia and Dalmatia.

ž like s in measure.

dž like j in jar.

r has the power both of a consonant and a vowel. As a consonant it sounds as in other languages. As a vowel it forms a separate syllable and is pronounced with a very slight sound of e. The orthography of this syllable varies. Some spell it èr, the Ragusans àr. Others omit à and è and simply write r, others again write r.

Accents used in Servian: acute ('); sign of length (');  $\cup$  or  $\cap$  sign of brevity.

# WALLACHIAN

Я а Б в В в Г г Д д Є є Ж ж З в З в Н Й й Î ĭ ĭ i К к	As Buke Vide Glagol Dobro Yest Shivete Zalo Zemlia I Ishe Kako Lïude Meslite	a   b   v   g   d   ye e long   zh   Nr. 6   z   i   y   k   l	Besides the Alphabet on the left there are two varieties of characters.  Logronounced Eer is appended to a consonant at the end of a word without being sounded. In modern printing it is omitted.  Logronounced Eer is appended to a consonant at the end of a word without being sounded. In modern printing it is omitted.	А Б В Г Д Е	а б в г д	à b v g d	Anti A B B Γ D E	a b b r d	Curr A B B Γ D	$egin{array}{c} a & & & & & & & & & & & & & & & & & & $	a b v g d
Б Б В в Г г Д д В є Ж ж З я В й Й й Î ĭ ĭ i К к	Buke Vide Glagol Dobro Yest Shivete Zalo Zemlia I Ishe Kako Lïude Meslite	b v g d ye e long zh Nr. 6 z i y	phabet on the left there are two varieties of characters.  b(pronounced Eer) is appended to a consonant at the end of a word without being sounded. In modern printing it is omitted.  bl (Yory) is only	Б В Г Д Е	б в г	b v g d	Б В Г D	Б В г d	Б В Г D	$egin{array}{c} \mathcal{B} \\ \mathcal{C} $	b v g d
В в Гг ДД В є Ж ж З я И Й й І ї ї і К к	Vide Glagol Dobro Yest Shivete Zalo Zemlia I Ishe Kako Lïude Meslite	v g d ye e long zh Nr. 6 z i y	there are two varieties of characters.  b(pronounced Eer) is appended to a consonant at the end of a word without being sounded. In modern printing it is omitted.  bl (Yory) is only	В Г Д Е	В Г	v g d	В Г D	в г d	Β Γ D	$egin{array}{c} eta \ v \ d \end{array}$	b v g d
Гг ДД Се Жж Зб ЗЗ НЙй Гті Кк	Glagol Dobro Yest Shivete Zalo Zemlia I Ishe Kako Lïude Meslite	g d ye e long zh Nr. 6 z i y	ters.  b(pronounced Eer) is appended to a consonant at the end of a word without being sounded. In modern printing it is omitted.  bl (Yory) is only	Г Д Е	Г Д	g d	В Г D	в г d	Β Γ D	$egin{array}{c} eta \ v \ d \end{array}$	v g d
ДД В є Ж ж З я В й Й й І ї ї і К к	Dobro Yest Shivete Zalo Zemlia I Ishe Kako Lïude Meslite	d ye e long zh Nr. 6 z i y	b(pronounced Eer) is appended to a consonant at the end of a word without being sounded. In mo- dern printing it is omitted. bl (Yory) is only	Д Е	Д	d	Г <b>D</b>	г d	Γ D	$egin{array}{c} v \ d \end{array}$	g d
В є Ж ж З я З з Н Й й І ї ї і К к	Yest Shivete Zalo Zemlia I Ishe Kako Lïude Meslite	ye e long zh Nr. 6 z i y	is appended to a consonant at the end of a word without being sounded. In modern printing it is omitted.  bl (Yory) is only	E		d	D	d	D	d	d
Ж ж З б З з И Й й Í ĭ ï i К к	Zalo Zemlia I Ishe Kako Lïude Meslite	zh Nr. 6 z i y	consonant at the end of a word without being sounded. In modern printing it is omitted.  bl (Yory) is only	E			]				d
Зз ИЙй Гтті Кк	Zemlia I Ishe Kako Lïude Meslite	z i y k	without being sounded. In modern printing it is omitted.  bl (Yory) is only	İ	C	y	]				
И Й й Î ĭ ï i К к	I Ishe Kako Lïude Meslite	i y k	sounded. In modern printing it is omitted.  bl (Yory) is only			1	L	е:	$\boldsymbol{E}$	υ	
Í ĭ ï i Кк	Ishe Kako Lïude Meslite	y k	omitted.  bi (Yory) is only	Ж	Ж	zh					yé e
Кк	Kako Lïude Meslite	k	ы (Yory) is only	3	3	Z	ŀ	ł	${m f}$	$\mathcal{F}$	j (Fr.)
i i	Lïude Meslite	1		I	i	i	Z	Z	$\boldsymbol{Z}$	Z:	Z
A A	Meslite	1	embrolegrin words	К	К	k	I	i	I	i	i
		1	of Slavonic origin.	Л	Л	1		_	_		
M m	3 T 3	m	Y Ishitza, occurs				K	k	K	k	k
н И	$\mathbf{Nash}$	n	in words derived from the Greek.	M	M	m	L	Л	$\boldsymbol{L}$	$\mathcal{A}$	l
0 0	On	0	After vowels its	H	H	n	M	m	M	m	m
II n	Pokoi	l P	sound is v, after	0	0	o	N	n	N	m	
Ρρ	Rtse	$  \mathbf{r}  $	consonants $i$ (as in $Bit$ ).	П	П	p		n		n	n
G c	Slovo	S		P	p	r	0	0	$\boldsymbol{O}$	0	0.
Тт	Tverdo	t			_		П	П	II	$\Pi$	p
8 δ	Uk	u	SHORT ACCENTS.	$\mathbf{C}$	c	S	P	р	P	p	r
Oy oy	Uniku	u	o is placed over an initial vowel	$\mathbf{T}$	T	t	ĺ				
ΦΦ	Fert	f ph	and the diph-	y	$\mathbf{y}$	u	S	S	S	S	s
X x	Khir	kh h	thong 10.	Ф	Ф	f	T	t	$\boldsymbol{T}$	t	t
<b>ω</b> ω	O	O long	o stands over a	X	X	kh(ch)	Y	<b>y</b> :	$\boldsymbol{\mathit{Y}}$	y	u
II ii	Tsi	ts	medial and final						Ф		f
Чч	Cher	ch	final 10.	Ц	Ц	ts	Φ	ф		$\phi$	
Шш	Sha Shta	sh sht		Ч	Ч	ch	X	X	$\boldsymbol{X}$	x	kh(ch
Щщ Ъъ	Yor		T ONG A GOTONIES	Ш	ш	sh	U,	u,	Ų	ų	ts
ъъ	Yaty	e short éa	LONG ACCENTS.	Щ	Ш	sht	ч	ч	$\overset{'}{m{y}}$	u	$\operatorname{ch}$
ж ж	Yus	è (uüh)	" over initial vowels and over 10.	Ъ		$\mathbf{e}$					
Юю	Yu	,	over medial vow-		ъ		u	w	Ш	u	sh
И на	Yako	yu	els.	Ъ	<b>'</b> B'	éa	Ъ	Ъ	<b>Z</b>	$\sigma$	e
М A	Ia	ya ya	over the medial	R	Я	ya	î	î	ĵ	i	(ün)
<del>0</del> &	Ftita	ft th	A and the final	Ж	Ж	(uüh)	_		_		
ÝÝ	Psi ·	ps	а, њ, <sup>д</sup> , н.	_	<b>.</b>	ün	Ų	ų	Ų	u	J
3 3	Xi	X	over abbreviations and let-		_		APO	STRA	ријет	ED T	ETTERS.
$\overset{\circ}{\mathbf{V}}\overset{\circ}{\mathbf{V}}$	Ishitza	vi*	ters employed as	İ	Ϊ	J	ں ا				U
<b>A A</b>	Ün	üng in Germ.	numerals.			are only foreign	0				Q'Q A
Цц	Je	j			rds.	Toreign	Uŭ	рo	d S	s T	't A'?

The Alphabet to the left is used in liturgical and ancient works. With the improved cultivation of the language the letters have been considerably simplified, as is shown in the two Alphabets at the right. No notice has been taken here of the ancient names and the accentuation of the letters.

# **POLISH**

	a l	ike	$\mathbf{a}$
Ą	ą		ong
	$\mathbf{e}$		e
	é		ié
Ę	ę		eng
	i	—	i
	0		0
O	ó	_	ou
	u	_	u
	y		e (ü)
	b b		b
		_	by'
Ć	c ć		ts
U			$ ag{tssh}$
	cz d		d
	dz	_	$\mathrm{d}\mathbf{z}$
	dź		dzy;
	dż		j
	f		f
	g		g
	ĥ -	l	i (ch)
	$\mathbf{ch}$		kh
	j		У
	k		k
	1		l
L	ł		
	$\mathbf{m}$		m
	ḿ		my'
,	n		n
Ň	ń		ny'
	b		$\mathbf{p}$
	γ́ r	—	p
	ı.		r
	rz		rsh
á	S	_	s ,
S	ś		sy'
	SZ		$\sinh$
	t		t v
	W vý		
	ψ́ z ź.		vy' z
Ź	Li Ž		z zy'
L	4,		z y

ŻżŻż—j(Fr.)

The marginal column shows the pronunciation of Polish letters in as far as it approximates the English. The vowels  $a, e, i, o, ou, u, \ddot{u}$  in the adjoining column are sounded as in German. The following peculiarities must be noticed.

These vowels have a clear and distinct sound, except the i which obtains the consonantal force of y, when it is followed by a vowel and preceded by b, c, dz, m, n, p, s, w, z. In this case the i is merely the medium of softening the consonant, Ex: biodro (loin) sounds byodro. Before e it becomes ie.

The consonants b, c, dz, m, n, p, s, w, z are attended by a slight and rapid articulation of y, as if written by, cy, dzy, my, ny, py, sy, wy, zy. They stand as finals of words, and also of syllables followed by consonants. Of these letters c takes the intermediate sound of our b and cb.

c sounds like ts in wants.

cz is our ch, and sz our sh.

dz sounds like ds in wands.

 $d\dot{z}$  is like j in jar.

h is of rare occurrence, the Slavonic h being represented in Polish by g. It is as guttural as the German ch, Ex: hultaj (a Good for nothing).

l the virgulated l is heavier than the common l. The middle part of the tongue is more raised in the articulation of this letter.

rz is r blended with  $\dot{z}$ . The r is softly rolled, and its z is like the French  $\dot{j}$ . Ex: przy.

 $\dot{z}$  like j in the French word jour.

To avoid the accumulation of softening iota-marks of the letters  $\acute{b}$ ,  $\acute{m}$ ,  $\acute{n}$ ,  $\acute{p}$ ,  $\acute{s}$ ,  $\acute{w}$ ,  $\acute{z}$ , the following process is preferred. Before a vowel an i is inserted (as bia mia etc.); before i however and before consonants the iota-sign is dispensed with;  $\acute{b}$ ,  $\acute{p}$ ,  $\acute{w}$ ,  $\acute{m}$ , lose this sign even at the end of a word. Owing to the diminution of the characteristic signs, the letters w, b, p, m, n, s, z deviate from the original rule and may be followed by either i or y.

## SORBIAN OR WENDISH OF LUSATIA.

The vowels are: a, o, u, y, e, i. The union of a and o makes o; o and u form o; e and i coalesce in e. The semi-consonant j is connected with i; h with e; w with a o u.

The consonants are divided 1) into Labials  $w,\,f,\,v,\,b,\,p,\,m.$  2) Palatals and Linguals  $n,\,l,\,r.$  3) Dentals  $d,\,t,\,\acute{e}.$  4) Sibilants  $z\,\dot{z},\,s\,\dot{s},\,e\,\check{e}.$  5) Gutturals  $h\,eh\,(g)\,k.$ 

With regard to their articulation these consonants are divided into broad and slender sounds, according as they are hardened or softened in their utterance.

Broad sounds: w, w, b, b, z, z, d, dz, dz, h, g. Slender sounds: f, v, p, p, s, š, t, c, ć, č, ds, ts, ch, k.

Between these letters nine intermediates take their place: m, m, n, n, n, l', l, l', r, r.

The whole Alphabet thus consists of the following 8 vowels and 32 consonants. A (ò) o, ó, u, y, e, ė, i; j, w,  $\dot{\mathbf{w}}$  (f, v) b, b, p,  $\dot{\mathbf{p}}$ , m,  $\dot{\mathbf{m}}$ , n,  $\dot{\mathbf{n}}$ ,  $\dot{\mathbf{l}}$ , l, (l'), r,  $\dot{\mathbf{r}}$ , z,  $\dot{\mathbf{z}}$ , s,  $\dot{\mathbf{s}}$ , d, dz, d $\dot{\mathbf{z}}$ , t, c,  $\dot{\mathbf{e}}$ ,  $\dot{\mathbf{e}}$ , ts, h, eh, g, k.

In combining one consonant or several consonants with a vowel to form a syllable, a distinction is made between hard soft and neutral consonants.

At the same time the following rule is to be observed. In the grammatical combinations of structure, derivation, declension, comparison and conjugation the vowel y cannot follow a soft consonant, nor can e and i follow a hard consonant, whilst the neutral consonants may be succeeded by either y or i. In conformily with this rule are reckoned as

Soft, j w v l p m n l r ż š ć dż č. Hard, ł r z s d dz t c (h ch g k). Neutral, w f b p m n ds ts.

The letters qu and x, in words of foreign origin, are spelled kw and ks, as kwadrat, Aleksander, kwas. Also g occurs only in foreign words. V and f are found in but few vernacular terms.

#### PRONUNCIATION OF THE CONSONANTS.

The accented characters  $\acute{\mathbf{w}}$   $\acute{\mathbf{b}}$   $\acute{\mathbf{p}}$   $\acute{\mathbf{m}}$   $\acute{\mathbf{n}}$   $\acute{\mathbf{r}}$  differ from the unaccented in softness of sound. Before e (acute)  $\acute{\mathbf{e}}$  and  $\acute{\mathbf{i}}$  this accent is unnecessary, because these vowels are sufficient to soften the preceding consonants.

I sounds like v. In the north-eastern part of the country it is pronounced like a harsh I. For instance colo.

dz as in English, but without a break between the two letters. Example na fidzy.

dż like g in gentle, as dżera, nadżya.

z as in English, f. i. zuby.

ż like the s in pleasure, f. i. żolty.

š like sh, f. i. šaty, šéry.

c like ts, as cybać.

é nearly like ch in churn, f. i. ćerń.

č the sharpest sibilant like tch in wretch, f. i. čorny.

ds, ts like ts, f. i. tsihać.

ch is frequently pronounced hard, like c before a, o, u, especially at the beginning of words, for instance chory.

j like y in yes.

s like z.

w like v.

#### PRONUNCIATION OF THE VOWELS.

a i u as the vowels in are, here, true.

e is acute, grave, or long. After c z s it is often pronounced like y.

o acute grave or lengthened.

ó deep nearly like u.

è like ea in dear.

y deep as ea in dearth.

# CZECHIAN OR BOHEMIAN.

Roman

abcdefghchijklmnoprstuvyz — á é í ó ú ý — ù — è Č č Ď ď D' ď Č ǧ ň Ř ř Š š Ť ť ť Ž ž

German

abedefghchijklmnoprfstuvnz-áéióúý-ů-ě Čč Ďďď ď Š Š Š Š Š Š Š Š Š Š Š

q and x only occur in foreign words. qu is generally replaced by kv as kvitance (receipt). Some writers use w for v and ou for au.

The accented vowels á é í ú y and û are long; without accent their pronunciation is short.

- ě i i are termed soft vowels. The others are hard,
- h ch k r are hard consonants.
- c č d' j ň ř š ť ž are soft, and
- b d f g l m n p s t v z are called indednite consonants.

# THE FOLLOWING SOUNDS DIFFER FROM THE ENGLISH PRONUNCIATION.

- a sounds like the first a in papa.
- á like a in father.
- c even before k, sounds like ts, as necky (nets-kü) the tray.
- č like ch in church.
- d before i i or when marked with the liquifying sign (d) is sounded dy. This consonantal y is softly blended with its d, as div or diw (pronounced dyiv).
- e like e in den.
- é like a in late.
- ě as ye in yet. It can only occur after v, f, b, p, m, n, d, t with which it coalesces. As věk (vyek) a century.
- ey like a in late followed by y in yet, as woley (call thou). This final y forms a distinct sound.
- g as in garnet. It only occurs in foreign words.
- h aspirated at the beginning and in the middle of a word like h in house. At the end of a syllable it partakes of the guttural sound of ch and is somewhat softer than ch in the Scotch loch.
- ch like ch in the Scotch word loch, as chleb (bread).
- i as in grin.
- í like ee in green.

- j like y, as jaro (pr. yaro) springtime,
- n before ii, or when marked ii, sounds like ni in opinion.
- o as in of.
- ó as in door.
- ou is a diphthong which blends the sound of o (in pole) with u (in put). These vowels retain their separate pronunciation in verbs with prefixed po, as poubrati (po-u-bra-ti).
- $\check{s}$  (in German type  $\mathfrak{f}$ , and as a final,  $\ddot{s}$ ) like sh in fish.
- t before i i, or when marked i, sounds like a t with which the semi-vowel y coalesces, as inlipan (pron. tyoo-le-pan) tulip.
- u as in put.
- ù and u long as in blue.
- y like u in the French pure.
- z as in English but.
- ž like s in measure.

#### ORTHOEPIC RULES.

- 1) The vowels with the long accent (') should not be lengthened to excess,
- 2) The consonants s,  $\check{s}$ , z,  $\check{z}$ , become mute before the affix sky, as  $vessk\check{y}$ .
- 3) The consonant j, as an initial before another consonant, is not pronounced, as jsem. When a syllable ending in a vowel precedes, the j becomes audible.
- 4) The compounds to ds and ts are pronounced like c; dš and tš, like č.
- 5) Prepositions consisting of a simple consonant, such as k, s, v, z, although standing by themselves, do not form a syllable, but are sounded together with the first syllable of the next word, for instance k tobě s námi. These unconnected prepositions cannot be placed by themselves at the end of a line or a page.

- 6) The auxiliary verb. jsem, jsi, jest-jsme, jste, jsou, the conjunctional particles bych, bys, by, bychom, byste, bý, and the reflective pronouns se, si attached to an active participle, are blended together in the pronunciation and joined by a hyphen. The same is the case when si, se are postpositions of nouns or adjectives. E. g. shledání-se, modlící-se.
- 7) The soft consonants must be carefully distinguished in articulation from the indefinites, and the i i ě must properly coalesce with the latter.
- 8) The sibilants c s z differ from each other as well as from č š ž.
- 9) h is never mute. Example hrom (thunder) in which the h sounds as the h in the Scotch pronunciation of which.
- 10) The accent always rests on the first syllable, as be-žim, pri-nesu. The accented syllable may at the same time be lengthened, as sná-žim, krá-sa.

#### DIVISION OF SYLLABLES.

In words which are difficult to pronounce, owing to the complication of consonants, it is of importance

to ascertain the component syllables. In this language most syllables end in vowels. The following circumstances must be noticed in applying this rule,

- 1) A consonant placed between two vowels or between a vowel and l or r, joins the next syllable. Example: stra-ka, ba-vl-na.
- 2) Of several consonants, followed by a vowel, only the last consonant goes to the next syllable; yet sk, šk, st, št are not separated but join the next syllable. In such instances the preceding syllable is often without a vowel, while l or r forms the medial consonant. Example, hrn-číř.
- 3) 1, r, ř, with a vowel after, are joined by the preceding consonant in forming one syllable. To this rule n forms an exception. The consonants sk, šk, st, št must without separation be annexed to the syllable which follows. Example, kno-flík, zei-dlik, svě-tlo, han-li-vý.
- 4) Compound words are divided according to their component parts, as ou-voz, ná-dvo-ří.

### HUNGARIAN.

The Hungarian language comprises 31 sonants which are expressed by the Roman Alphabet. Owing to the combinations of some letters the Alphabet is formed as follows:

a b cs cz d e f g gy h i j k l ly m n ny o ö p r s sz t ty u ü v z zs.

The vowels  $a e i o \ddot{o} u \ddot{u}$ , are sounded as in German. With the accent at the top the vowels  $\acute{a} \acute{e} \acute{i} \acute{o} \ddot{o} \ddot{u} \ddot{u}$  are lengthened.

The combinations cs cz gy ly ny sz ty zs represent single articulations and are inseparable in spelling.

cs sounds like ch as kocsi.

cz » » ts as czukor.

gy » di in the French word Dieu, as  $gy\acute{a}r$ .

ly » » il in the French word email, as homály.

ny » ni in opinion, as anya.

sz ,  $\Rightarrow$  s as szag.

ty » » ti in the French metier as tyuk.

zs » j in the French word jour as  $zs\acute{a}k$ .

With regard to the consonants is to be noticed that,

j is pronounced like y in yes, and

s like the English sh, as sas.

The letters c ch q w x are only found in foreign words, for instance Cato, Achilles.

y does not represent an independent sound, but simply helps to soften the antecedent letter. Nevertheless in Old-Hungarian words y and ch are employed as independent letters. The former then sounds like i in it, and ch as in church. For example P'alffy, Forgach.

The compounds cs and cz are often denoted by ts and tz. Modern Orthography rejects this spelling except in words where the t is radical, as  $bar \acute{a} ts \acute{a} g$  (not bar  $\acute{a} cs \acute{a} g$ ).

### LETTISH.

The Lets have adopted the following 22 letters of the German Alphabet,

abcbeghijflmnopristuwz.

The c and h are only used in combination with i to express the sounds of ich and ich. The h moreover serves to lengthen the vowels. The German consonants h ch i v never occur in Lettish. Nor are i and ii in use. The q r h are represented by fiv, is.

By means of the 22 characters the following 34 simple sounds of the Leftish language are formed.

abbjdegg Gjikk Rlk&m mjun Roppir e R f df sch dsch f S (8) sch t tsch u w wjz.

PRONUNCIATION OF THE SIMPLE VOWELS.

a e i n are short. When lengthened they are marked thus,

âêîû

The  $\mathfrak o$  is always long, nevertheless it receives the lengthening mark to distinguish the accented  $\mathfrak o\mathfrak h$  and  $\hat{\mathfrak o}$  from the lighter  $\mathfrak o$ .

#### PRONUNCIATION OF THE DIPHTHONGS.

There are six diphthongs in this language, at an et of ni ee. The first five are pronounced as in German. Although at and et are naturally long they occur with the circumflex at et. The diphthong of only appears in the word wot. When an and ni are to become separate syllables the n and i are marked with the diæresis, an, ni. Peculiar is the sound of ee; it passes from the articulation of ee (such as is heard in the German word See or in the English word say) to an intermediate sound, such as is heard in the second a of advantage.

#### CONSONANTS.

The following letters have the English sound,  $\mathfrak{b} \mathfrak{f} \mathfrak{m} \mathfrak{n} \mathfrak{p} \mathfrak{r} \mathfrak{t}$ . The j is a consonant like our y;  $\mathfrak{w}$  sounds as  $\mathfrak{v}$ , and  $\mathfrak{z}$  like  $\mathfrak{t}\mathfrak{s}$ . The labials  $\mathfrak{b} \mathfrak{m} \mathfrak{p} \mathfrak{w}$  may be followed by the modifying j, which like the Russian  $\mathfrak{b}$ , helps to soften the consonant and causes a slight i to ring after it. It cannot be separated from the consonant nor uttered as an independent letter. In  $\mathfrak{r}$  are virgulated as  $\mathfrak{t}\mathfrak{n}\mathfrak{r}$ , instead of being followed by j. Besides these letters the following four are virgulated.

g like the German f before e and i; g is like f before a o u.

f hard like k in king, f as c in come, cut.

f, sharp like our s. & is the final of this sharp f.

j is soft like our 3.

b) form an inseparable sound like the soft Italian z.

fc sharp like the Russian m and the English sh. The virgula of f and fc does not indicate the sound of an inherent j. It only helps to distinguish the sharply pronounced consonant from the soft f and fc, the latter is pronounced like the Russian x or the French j in jour.

tsd) is like the English ch and bsd) like g in gentle.

#### PRONUNCIATION OF SUCCESSIVE CONSONANTS.

Two or more Consonants, joined together in one syllable or in two syllables, must be so articulated that each should retain its original and independent sound. The n is somewhat modified by the g and f. It being assimilated with these letters, its sound is like that in the English words sing, sink (not as in tingle, tinkle). When g and f are marked with the cross-stroke the n is likewise virgulated, and is then pronounced in accordance with the foregoing rules.

### **GERMAN**

A or	U	a	a	M n	N	n	n	El «	Ü	ä	ä
L b	$\mathfrak{B}$	$\mathfrak{b}$	b	O v	D	o	0	Ö "	Ö	ö	ö
L	C	c	c	Rog	$\mathfrak{P}$	$\mathfrak{p}$	p	9" "	ü	ü	ü
	$\mathfrak{D}$	<b>b</b> .	d	9 -9	$\mathfrak{Q}$	q	q	-if	ch		ch
f n	E	e	e	H m	R	r	r	-k	cŧ	,	ck
est of	$\mathfrak{F}$	f	f	MAS	$\mathfrak{S}$	§ ŝ	s	ff.	ff		ff
J my	(§	$\mathfrak{g}$	g	07 1	$\mathfrak{T}$	t	t	fi	fi		fi
If I	$\mathfrak{H}$	$\mathfrak{h}$	h	Min.	u	u	u	fl	fl	•	fl
J i	$\Im$	i	i	All so	$\mathfrak{V}$	$\mathfrak v$	v	fi	ĵi		si
Fj	$\Im$	j	j	Man	W	w	W	-JP	îĩ		ss
R k	$\widehat{\Re}$	ŧ	k	26 6	$\mathfrak{X}$	$\hat{\mathbf{r}}$	X	A	ĩt		st
$\mathcal{L}$ $\ell$	$\mathfrak{L}$	ĺ	1	J -y	$\mathfrak{Y}$	1)	y	-3	$\mathfrak{F}$		SZ -
Mim	M	111	m	33	3	3	Z	4	ţ		tz

The vowels are: a a e i e o u u. The diphthongs or compound vowels are: ai ei au au eu; all other letters are consonants.

Simple vowels.

Every vowel, followed by two consonants, is short, if followed by only one consonant it is long.

It is pronounced like a in the English word father.

is pronounced like a in the English word late.

is pronounced like e in the English word late.

is pronounced like e in the English word let.

is pronounced like e in the English word me.

is pronounced like o in the English word hope.

is pronounced like eu in the French word seul.

Do is pronounced like eu in the French word seul. It is pronounced like oo in the English word roof. it it is pronounced like the French n. There is no corresponding sound in the English language.

The pronounced like the French n. There is no corresponding sound in the English language.

The pronounced like the French n. There is no corresponding sound in the English language.

it is generally replaced.

Double vowels.

The double vowels aa, ce, co, are no diphthongs, because only one letter is sounded, and the second serves to indicate that the syllable is long.

ie is pronounced like ea in the English word meat.

Diphthongs.

In the German diphthongs, the two vowels must be sounded one after the other, but so quickly as to form only one syllable.

ai and ci are pronounced almost alike, and have the sound of the English i in the word fire.

au is pronounced like ou in the English word house.

and cu sound almost like toy in the word joy.

Consonants.

Consonants.

The pronunciation of the consonants differs but little in the two languages; the learner should notice the following peculiarities.

C t before å c and i is pronounced like ts.

Before a v u, before a consonant, and at the end of a syllable it is pronounced like k, by which in most cases it may be replaced.

Ch at the beginning of a word is pronounced like k, except in words derived from the French, in which it retains the French pronunciation.

In the middle or at the end of a word & has a pronunciation quite peculiar to the German language, and more or less guttural, but for which no corresponding sound can be found in English; it is like the Scotch ch in the word loch after a v n an, but softer after ä e i ë n än en, and after a consonant. He or this is pronounced like x when these consonants belong to the root or radical syllable.

But the dipreserves its guttural pronunciation, when it stands before the s or j by contraction or in a compound word.

G at the beginning of a syllable is pronounced like the English y in the word good; but between two vowels, in the middle of a word and at the end of a syllable it has a sound like the diprending of a syllable is pronounced like a very soft k.

S h is always aspirated at the beginning of a syllable. pronunciation quite peculiar to the German language,

5 h is always aspirated at the beginning of a syllable. The aspiration becomes however almost imperceptible before a final c.

After a vowel or a t, the h is not pronounced, but, only indicates that the syllable is long.

3 i only stands at the beginning of a syllable and is pronounced like the English y in the word yet. d replaces the double f, and is pronounced short.

On qu has the sound of kv in English.  $\mathfrak{S}$  is at the beginning of a syllable is pronounced like the English z, at the end of a syllable however like the English s.

The long his placed at the beginning and in the middle, sonly at the end of syllables. If in an uninflected word there are two i one after another, they are written if, is only placed at the end or in the middle of syllables, has the sound of the English sy.

Eth st is pronounced like the English sh.

the spronounced like st and sp in English; but in some parts of Germany they pronounce that the beginning of a word like sht, and is like shp.

It is pronounced like the English v.

It is sounded like ts.

# replaces the double 3 and is pronounced very hard.

## DANISH

$\mathfrak{A}$	a
Aa	aa
$\mathfrak{B}$	в
$\mathfrak{C}$	c
D	b
E	e
$\mathfrak{F}$	f
$\otimes$	g
$\mathfrak{H}$	h (haa)
$\Im$	i
$\Im$	j (Jod)
$\Re$	f (kaa)
$\mathfrak{L}$	l
M	m
$\mathfrak{N}$	$\mathfrak{n}$
$\mathcal{D}$	o
$\mathfrak{P}$	$\mathfrak{p}$
$\mathfrak{Q}$	q
R	r
$\mathfrak{S}$	j ŝ
T	t

 $\mathfrak{u}$   $\mathfrak{u}$ 

Xx

3 3

**W** & (ä)

D 0 (ö)

**B** v (we)

The Danish language forms part of the great Gothic family and derives its origin from the ancient Norse which once extended over the whole of Scandinavia. Hence it is closely connected with modern Icelandic and Swedish, more distantly with the German, Dutch and English languages. In its further development it has embodied a variety of terms from the French, Latin and Greek.

The Alphabet consists of the adjoining 28 characters.

#### VOWELS AND DIPHTHONGS.

The simple vowels are

aaaeioubæs

They are long as in Stat (the a as in star) Raad, Been, blid, or short as in Stad, Aand, ved, Bid. The vowels e i o u v s have an open sound as in Plet, Digt, godt, or a close sound as in ftred, ftrid, god. e i u, as long middle vowels, are doubled unless the word ends in v b v as Steen, Been, Muus. At the end only the v is doubled, as lee, see. The other vowels at the end of a syllable are always long, as v as, Sti, v so, and often add a mute v as stage. In inflections the reduplication of the vowel ceases, as Huus, Huse. The vowels v cannot be spelled as v is pronounced like the French v, not like the English v. Ex: Jude. as mostly sounds like v in v arm. In modern times v has been adopted for aa, and v for the open v. For the deep pronunciation of this vowel, the mark v has been retained.

As diphthongs are reckoned ai ei oi oi oi oi au eu ou ui. Some grammarians only admit the following six, ai au ei eu ou oi. The pronunciation of these vowels consists in a rapid blending of their respective sounds.

#### CONSONANTS.

The consonants are

bedfghitlmnpqrsftvrz.

According to the organs of speech they are divisible into: 1) Linguals btinr. 2) Labials bpbfm. 3) Palatals gfqj. 4) Sibilants f3. 5) Aspirate h. In the dialect of the Juts the h is aspirated before j and v. bbg and v are softened to such a degree as to become frequently inaudible. After a vowel or when placed between two vowels b is pronounced bh (like

the Anglo-Saxon  $\delta$  or the English th in smooth). Double  $\delta$  has a similar pronunciation. It and not sound like ll and nn. In  $v\delta$  the  $\delta$  has a very soft sound. Also before  $\delta$  the  $\delta$  loses part of its force, and it becomes inaudible before t. j sounds like j in j in j sounds like the English v.

The following letters are peculiar to foreign words. 1) c before  $\mathfrak{a}$  or  $\mathfrak{a}$  or a consonant, is pronounced as in English; before  $\mathfrak{e}$  in  $\mathfrak{a}$  or  $\mathfrak{a}$ , it is like s. (a) is like k. 2)  $\mathfrak{q}$ , followed by  $\mathfrak{v}$ , sounds like kv. 3)  $\mathfrak{z}$  is like dz or tz, and sometimes like the English z. 4)  $\mathfrak{x}$  in the middle and at the end of a word is like gs or gs. As an initial it is almost as soft as gs.

Combinations of letters, ff fi fi fi fi fi fi.

### SWEDISH.

The Alphabet consists of the following 28 letters,

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Oo Pp Qq Rr Ss Tt Uu Vv Xx Yy Zz Åå Ää Öö.

#### PRONUNCIATION OF THE VOWELS.

The vowels a o u  $\mathring{a}$  are hard, and e i y  $\ddot{a}$   $\ddot{o}$  are soft. The vowels a i u sound as in German or Italian.  $\ddot{a}$  is like a in bare.  $\mathring{a}$  like o in tone. The e sounds as a in ale. 1) when forming an independent syllable, Ex: e-vig (eternal). 2) at the end of a syllable, Ex: ande (spirit). 3) In many monosyllabic words, inflections, derivations and compounds. e sounds like ai in air. 1) before f g l m r, when the next syllable of the same word is a consonant, as efter (after). 2) before j as nej (no). 3) in many monosyllables, as elg (elk). These rules have many exceptions. o has two sounds, 1) nearly as in move, when it constitutes a syllable by itself, or at the end of a word; also before the radical m, in nouns and adjectives; in all derivatives of words ending in o; before x and in various other forms of words. 2) o has a lengthened sound before a final f, and a sharp sound (as in not) before m n p r t. —  $\ddot{o}$  is mostly lengthened (nearly like the French eu in leur) as  $d\ddot{o}$  (to die), or the sound is sharper and quicker, as för (for).

There are no diphthongs in this language.

#### CONSONANTS.

- b retains its ordinary sound.
- c before k stands for kk. Before h it only occurs in the Swedish word Och (pronounced ock). Before the soft vowels it sounds like s, before the hard vowels like k.
- d sounds like our d. Before t like t. As a final after n almost like n. Before j it is silent.
- f as in English. At the end of a word like v. In the middle of a word before v of the same syllable, also after l and r, it is mute Ex: kalfven (pron. kalven). f and v of separate syllables retain their original sounds. Ex: drifved (= driv-ved).
- g 1) as in good before a hard vowel, before i and e in a sharp unaccented syllable, at the end, and before a consonant of the same syllable. 2) like y in yes, before the soft vowels, and after l and r. Ex: ge (like ya). Of this rule there are some exceptions. 3) like ck when a t follows. Ex: sagt (=sackt). 4) like ng when a syllable ends in gn, as vagn (pronounced vangn).
  5) before j it is mute. Ex: gjort (pr. jort).
- h is aspirated, before j and v it is mute.

- j like y in yes. After f m n p the j is clearly articulated and the preceding consonant has a very slight pronunciation. As a final letter it is somewhat like the German ch.
- k 1) as in English. It is subject to the same rules as g. 2) before the soft vowels it is like our ch. In kjortel the k sounds like t.
- l before j is mute.
- m as in English. The final m sounds like two m in those radical words which, on being inflected, are spelled with double m. Ex: lam (pron. lamm).
- q with v after, sounds like kv.
- r and s as in English. stj, sj, skj like sh. sk before soft vowels is likewise pronounced as sh.
- t as in English. tj like ch in church. tion, with a hard vowel before it, like schone, and after a consonant like shone.
- v as in English. The word von is pronounced fon as in German from which language it is borrowed.
- x is like ks.
- z is pronounced like s.

## ANGLO-SAXON.

The Anglo-Saxon language developed itself from the Low-German (Old-Saxon) idiom, which was introduced in England by the Saxons in or before the fifth century. In the ninth century this language was cultivated in writing, and obtained currency through the agency of laws and translations. In the eleventh century, with the overthrow of the Saxon dynasty and the commencement of the Norman rule, French became the language of the court and of judicial proceedings. The knowledge of the Anglo-Saxon language was confined to the dependent classes and to the residents of convents. In the thirteenth century, when this idiom once more became popular, it had received such an amount of foreign elements, and had lost so many native characteristics, that it could only be considered as a mixed dialect, out of which the modern English language was gradually formed.

		-
Αa		a
Вb		а
$\mathbf{C} \mathbf{c}$	c	y
Dδ	d	
е в	e	æ
FF	f	
$\mathbf{G}$ 3	g	T
Ьh	h	c
	i	·
k k		f
Ll	1	g
$\Omega$ m	m	
	n	
0 o	0	۰ (
Рр		ł
Rη		
ST	s	
Ττ		ł
CI u	u	
VP		1
		j
X ∞ Ý ÿ	$\mathbf{y}$	(
$\mathbf{Z}_{\cdot}\mathbf{z}$	Z	
Ð 8		
bb		
- •		1

#### PRONUNCIATION.

- a e i o u have the same sound as in German or Italian.
- y has the same force as in English.
- æ sounds as a in that.
- The Consonants have the following peculiarities of pronunciation,
- c is in all instances hard like k. cw stands for kw.
- f between two vowels or as a final letter is pronounced like v.
- g is always like the modern g in go. Occasionally 3 occurs instead of g. This letter takes the sound of y in yes.
- eg is used instead of gg.
- h is a strong aspirate. As a final of a syllable and before a consonant it resembles the German ch.
- hw answers to the English wh. h is also found before the liquids l, n, r.
- w sometimes precedes r and 1.
- b (tha) hard, like th in thick.
- δ (eth) soft, like th in this. Usually p is the initial and δ the final of a syllable.
- $\supset$  and  $\mathcal F$  stands for and.
- b stands for pæt.
- I stands for obje.

The accent (') over a vowel denotes its length. In words of equal spelling this accent points out the difference of sound and meaning. For instance ac (but, eke) ác (oak). The elision of m and n is indicated by a short line '(-) over the antecedent letter.

## IRISH.

It has been a subject of learned discussions whether the Irish in the Pagan period made use of the ancient alphabets, which are known by the name of Ogham, and are preserved in some sculptured monuments and in various MSS. With the introduction of Christianity and the spreading of conventual education the subjoined Alphabet was formed, which is still employed in antiquarian publications and in some works intended for the Irish people. At the present time the Irish language is frequently written and printed in Roman (English) characters.

<b>21</b> 4 a	21) 111 m
<b>B b</b> b	11 11 n
C c c k	0 0 0
b c <b>P</b>	Ppp
e e e	Rur
FFf	S r s
<b>5</b> 5 g	τσ t
1 1 i	Ur u
1 1 1	1) 1) h

#### LIGATURES.

Irish MSS, contain contractions of which the following are the most usual.

$ar{r}$	chd	<b>5</b>	glı
40 44 44 74 6	adh	10, 15	i
1É	e	111	11
4	air	1116	m
A	an	11112	m
$\boldsymbol{\tilde{\mathcal{X}}}$	am	11)	W
7	agur	110	n
4	ar	l ij	nn
ъ	$\mathbf{v}$ $\mathbf{w}$	Þ	f
bj≥	$\mathbf{v}$ w	pp	b
ър	b	in	rr
CC	g	) ř	h
cc ċ	ch	ij	si h
- 42	d	7.2	
င်	d	77	t
ę	ea	100	d i
esö	ea	200	i
50 6 6 6 6 7 5 7	$\mathbf{h}$	川町神神川下河市ででで今谷谷山	ie
5c	g	1,00	ie i
<b>J</b> -	-	1 1115	1

## **GOTHIC**

Form	Value	Num:	Ligatures and
	!	power	marks
Ŋ	a	1	LIGATURES
В	b	2	of frequent oc- currence in the
$\mathbf{r}$	g	3	Skeireins.
a	d	4	The for ht
$\mathbf{e}$	e	5	<i>ч</i> и — <i>4</i> и
> <b>u</b>	q	6	M — MN
Z	Z	7	$n_{\mathbf{k}} - n_{\mathbf{k}}$
h	h	8	и — ии
ψ	dh (þ)	9	ы — на
ιï	i	10	NS — NS
ĸ	k	20	к — кф
λ	1	30	<b>β</b> — ψ <b>β</b>
М	m	40	ΨΨ
И	n	50	
> G	j	60	MONOGRAMS.
≥ n	u	70	<b>A</b>
Π	p	80	for mathaius
K	$\mathbf{r}$	100	ioi matpaius
S	s	200	W
Т	t	300	for markus.
Y	v	400	
F	f	500	NUMERICAL
$\mathbf{X}$	x	600	FIGURES.
0	W	700	q = 90
Q	o	800	

The Gothic language was in ancient times spoken by the eastern Germans who were designated by the collective name of Goths. It belongs to the Indo-Germanic family, and as a dead language, it has been remarkably preserved in the most ancient relic of Germanic literature. It is the first of the sister-languages that was committed to writing, and has thus reached us in its original purity. Although the relics of Gothic literature are very scanty, for beyond the fragmentary version of the Bible and the so called Skeireins, we possess but insignificant remains, there is enough matter extant to afford a perfect insight into the grammatical structure of the

Observations

The Gothic Alphabet has the adjoining 25 letters. Their names are not known, as the language was not cultivated by native grammarians. The invention of the Gothic characters is attributed to Ulphilas.

To distinguish the numerical letters from the other characters, the sign — or — is placed above or below the number. In these cases the diæresis over the ï is omitted. Such letters receive a characteristic dot on the right and left. In the Neapolitan copy two dots, in the shape af a colon, are placed on both sides of the letter. Instead of dots the upright circumflex is \(\ell\) sometimes to be found,

'B' (2), 'H: (40), 'G' (60).

The "catchword" is likewise enclosed between upright circumflexes, as , &.

#### ORTHOGRAPHICAL SIGNS.

1. Diacritical signs only occur in the diæresis over the initial  $\ddot{\mathbf{I}}$ .

2. Punctuation. As a general rule the single stop represents the brief pause, and the double stop a longer pause. Yet this punctuation is not consistently carried out, such signs being often introduced without purpose, and contrary to the sense. After a long pause a blanc space is left. In the other parts of the text the words are all strung together without division, and sometimes the new sentence is placed in an other line, in which case the initial letters are preceded by the sign

3. The division of a word, written in two lines, is often made without any rule, and merely to fill the vacant space. The separation is in rare instances indicated by a hyphen, which then is marked at the beginning of the new line, and not at the end of the preceding one.

4. Quotations are distinguished from the text by the single upright mark or the double

1. This mark is continued in the margin before all the lines which contain the quotation.

2. In the Skeireins, which has single marks of quotation, the sign is superadded in the first line, and the sign in the last.

5. Abbreviations. The elision of n is marked by or , and m by or . These signs are generally used at the end of a line, when there is not enough space for the letters, but sometimes they also occur in the middle of a line. Real abbreviations are in some instances indicated by the sign, before and after the word, but generally the signs or are employed.

### RUNES

			Num:
Form	Name	Value	power
٣	Fé	f	1
U	$\mathbf{Ur}$	u	2
<b>&gt;</b>	Thurs	th	3
1	Os	0.	4
R	Reid	r	5
۲ *	Kaun	k	6
*	Hagl	h	7
K	Naud	n	8
	Is	i	9
ار ا	Ar	a .	10
4	Sol	s	11
$\uparrow$	Tyr	$\mathbf{t}$	12
B	Biörk	b	13
1	Laugr	1	14
\ \	Madr	m	15
$\downarrow$	Yr	У	16

The adoption of the Norse Runes takes its origin in remote antiquity, and probably belongs to a pre-christian period, as is suggested by a variety of coincidences, although hitherto no positive proofs have been discovered in the Runic stones, by which those monuments might be connected with the prevalence of paganism. As is the case in the Greek, Gothic and other alphabets, the Runic signs represent both letters and numerals. These characters, 16 in number, bear peculiar names, and appear to have been arranged in an arbitrary manner, no attention having been paid to the mutual relation and transition of the several letters.

Observations

The Runic characters were divided into three classes, in which the letter headed the first series, \* and \* each of the other two series. These three divisions were therefore respectively named Freys-aett (Frey's family), Hagls-aett and Tyrs-aett. It is obvious that these letters could but imperfectly express the variety of sounds. There was only one sign for g and k, d and t, b and p, u v and y. It is most curious that the connective e and  $\ddot{o}$  are omitted in this system. The latter vowel is replaced by au, and the former by i, a, ia and ai. Instead of g and gh the h is occasionally employed, while u might serve as the substitute of o, of the vowel y, of the diphthongs ae, au and ey, and even of the consonants v and f. Yr was equivalent to final r (of the same value as or

and ur), and as such it was called aur. When the insufficiency of the Runic alphabet was more sensibly felt, four additional letters were adopted, namely e, g, p and v. Their names were no longer in conformity with the 16 archaic characters. Nor were new shapes given to these Runes. The simple expedient of adding one dot or two to the kindred letter was considered sufficient; therefore these sign bear the name of stungnar runir (dotted runes). The old letters adapted to this purpose are i, k, b and f. When the Roman characters, along with the use of paper and parchment were adopted in the North, the Runes were increased by the addition of dh, d, ae, oe, ue, and subsequently by the superfluous letters c, q, x and z. The latter signs may be regarded as spurious augmentations of the Runes. The same criticism seems to hold good in reference to the three double runes, by which the numerals were increased to ninteen, and beyond which the numeral system of the Runes does not extend.

The 3 double-runes are,

Arlaugr. 17.

\* mm, Tvimadr. 18.

Φ tt, Belgthor. 19.

To express the subsequent numbers, several Runes were combined.

(= twice ten) denoted 20. = 21. = 22 and so on.

# RUNES

compared with the Gothic Alphabet of Ulfilas.

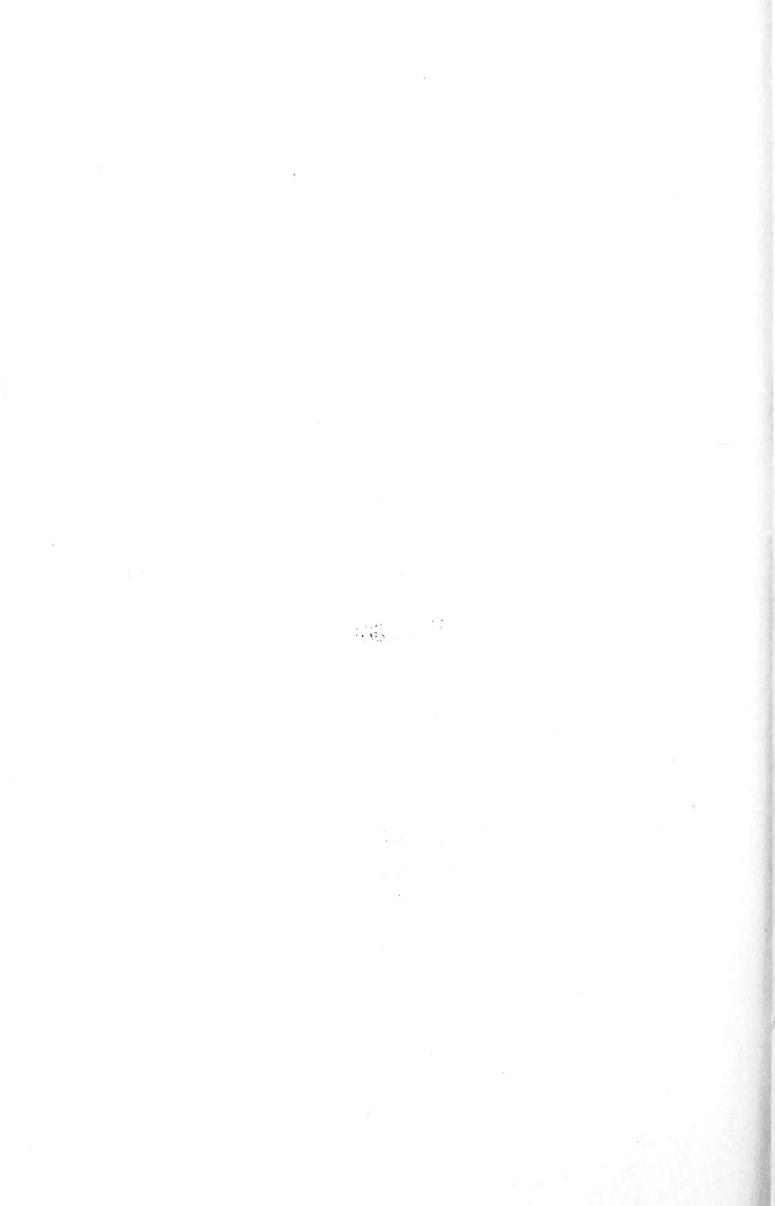
:	Northern Runes		Golden Bracteates	Go E	olden Iorn	A	Anglo-Sax	on	A	Alphabet of	
r	fê	f	r	6		ץ	feoh	f	F	faíhu	φ
n	ûr	u v	U		,	υV	ur	u	'n	urus	ου ο
Þ	Þurs Þorn	Þð	þ			Þ	Þorn	Þ	ψ	Paúrnus	2
1 #	ôs	o	1	7	a	×	os	o	Ą	ans	α
R	reið	r	R	R	r	R	rad	r	K	raiða	6
r	kaun	k g	<	<	c (k)	トナナ	cen	$\mathbf{c}(\mathbf{k})$	ĸ	kaunzama	k с (γ и)
			X	X	${f g}$	X	gyfu	$\mathbf{g}$	Г	giba	γ
			P	P	V	P	wen	w	YP	vinja	Vυ
*44	hagal	h	Н	ΗН	h	H  ≠	hægl	h	h	hagls	h
+ +	nauð	n	+	ł	n	+	nyd	n	И	náuþs	ν
1	is	i	1	1	i	I	is	i	ı	eis	ι (η υ ε ει)
11	âr	a	q			фф	ger	<b>ge</b> (-y)	G	jêr	c
(人)	$(\mathbf{\hat{y}r})$		1			11	eoh	eo	ΖZ	iųja	ζ (σ)
			R			H	peorð	p	п	paírþr	π
			Ψ	ð.		Y	eolhx				
И	sôl	s	5	>	s	И	sigel	s	s E C	sôjil	σ (ζ)
11	tŷr	t d	1	1	t	1	tir	t	Т	tius	τ
B	biarkan	b p	В			B	beorc	b	в в	baírika	$\beta$ (v)
			М	M	e	M	eh	e	e (~)	aíhvus	η (ιεαιαε)
ΥФ	maðr	m	M	Ψ	m	MM	man	m	н	manna	μ
1	lögr	ı	1	1	l	1	lagu	l	λ	lagus	λ
			<b>♦</b>	<b>\$</b>	gg(ng)	X	ing	ng	X +	iggvs	$\chi$ (k)
			\$		d	M	dæg	d	a	dags	$(\mathcal{Z})$ $\delta$
			( <b>M</b> )	\$	0	ጸ	eðel	é æ	Q	ôþal	ω (ο ου)
						14	ac	à			
						1	æsc	æ			
						Æ	yr	y			
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